

Table of Contents

I.	Earned Degrees.....	2
II.	Employment History	2
III.	Honors and Awards.....	3
A.	National/International Honors and Awards.....	3
B.	Professional Certifications	4
C.	School/Institute Awards.....	4
IV.	Research, Scholarship, and Creative Activities	5
A.	Published Books, Book Chapters, and Edited Volumes	5
B.	Refereed Publications and Submitted Articles	5
C.	Other Publications and Creative Products	18
D.	Presentations	24
E.	Grants and Contracts (\$4,073,579 as PI and \$4,633,914 as Co-PI).....	31
F.	Other Scholarly and Creative Accomplishments.....	41
G.	Societal and Policy Impacts.....	41
H.	Other Professional Activities.....	42
V.	Education	43
A.	Courses Taught.....	43
B.	Individual Student Guidance.....	46
C.	Educational Innovations and Other Contributions	63
VI.	Service	67
A.	Professional Contributions.....	67
B.	Public and Community Service	73
C.	Institute Contributions.....	73

Baabak Ashuri
Professor

School of Building Construction | School of Civil & Environmental Engineering

I. Earned Degrees

Ph.D.	2008	<i>Georgia Institute of Technology</i>	Industrial and Systems Engineering
M.S.	2006	<i>Georgia Institute of Technology</i>	Operations Research
M.S.	2004	<i>Georgia Institute of Technology</i>	Building Construction & Integrated Facility Management
B.S.	2002	<i>Sharif University of Technology</i>	Civil Engineering

II. Employment History

03/20–Present	<i>Professor</i>	School of Building Construction School of Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia
08/15–02/20	<i>Associate Professor</i>	School of Building Construction School of Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia
06/15–Present	<i>Fellow</i>	Brook Byers Institute for Sustainable Systems (BBISS), Georgia Institute of Technology, Atlanta, Georgia
08/09–Present	<i>Director</i>	Economics of the Sustainable Built Environment (ESBE) Lab, Georgia Institute of Technology, Atlanta, Georgia
08/14–07/15	<i>Associate Professor</i>	School of Building Construction, Georgia Institute of Technology, Atlanta, Georgia
08/08–07/14	<i>Assistant Professor</i>	School of Building Construction, Georgia Institute of Technology, Atlanta, Georgia
06/04–08/08	<i>Tennenbaum Research Fellow</i>	School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, Georgia
05/07–08/07	<i>Intern Analyst</i>	Chainalytics LLC, Atlanta, Georgia
05/06–8/06	<i>IBM Research Intern</i>	Business Informatics Group, IBM TJ Watson Research Center, Yorktown Heights, New York
01/04–08/08	<i>Academic Tutor</i>	Georgia Tech Athletic Association, Atlanta, Georgia
01/03–05/04	<i>Graduate Research and Teaching Assistant</i>	Building Construction Program, Georgia Institute of Technology, Atlanta, Georgia
09/02–12/02	<i>Lab Instructor</i>	Construction Engineering & Management Program, University of Alberta, Edmonton, Alberta, Canada
01/02–05/02	<i>Instructor</i>	Department of Civil Engineering, Sharif University of Technology, Tehran, Iran

III. Honors and Awards

A. National/International Honors and Awards

- The *Construction Industry Institute (CII) 2018 Celebration of Engineering & Technology Innovation (CETI) Award* in the category Outstanding Early Career Researcher for Project “Data Analytics – Improving Our Understanding About Design Development Process Enabling Improvements in Design Productivity the Project,” CII/FIATECH
- The *2017 ASCE (American Society of Civil Engineers) Thomas Fitch Rowland Award* for the paper entitled “Price Adjustment Clauses and Submitted Bid Prices for Major Asphalt Line Items in Highway Projects” published in the ASCE Journal of Construction Engineering & Management (This paper was also nominated for the ASCE Arthur M. Wellington Award. The paper was coauthored by two Georgia Tech graduate students, Mohammad Ilbeigi and Soheil Shayegh.)
- The *2017 National Research Faculty Award* from the Associated Schools of Construction (ASC)
- *Certificate of Appreciation for Outstanding Service as Construction Research Council (CRC) Chair*, ASCE Construction Institute (CI), June 2017
- The *2016 Rising Star in Civil Engineering*, Civil + Structural Engineer
- The *2015 Design-Build Institute of America (DBIA) Distinguished Leadership Award* in the Faculty category
- The *2014 Engineering News-Record (ENR) Southeast’s “Top 20 Under 40” list*
- Nominated by the Georgia Department of Transportation (GDOT) for the *2014 High Value Research “Sweet Sixteen” Award* by the Value of Research Task Force, The American Association of State Highway and Transportation Officials (AASHTO) for research project “Development of Risk Management Strategies for State DOT’s to Effectively Deal with Volatile Prices of Transportation Construction Materials”
- The *2013 High Value Research “Sweet Sixteen” Award* from the American Association of State Highway and Transportation Officials (AASHTO) for research project “Recommended Guide for Next Generation of Transportation Design Build Procurement and Contracting in the State of Georgia” (Selected by the AASHTO’s Standing Committee on Highways [SCOH] as the top 5 of the 16 Research (Sweet 16) Projects of high quality across the nation presented on October 18, 2013 at the SCOH Technical Meeting)
- The *2013 Outstanding Reviewer Award* from the ASCE Journal of Construction Engineering and Management
- The *Highly Commended Award Winner at the Emerald Literati Network Awards for Excellence 2012* for the paper “A real options framework to evaluate investments in toll road projects delivered under the two-phase development strategy” published in the *Built Environment Project and Asset Management Journal*, May 2012 (The co-authors were two of Dr. Ashuri’s former Ph.D. students: Jian Lu and Hamed Kashani.)
- The *Early Career Award from the ELECTRi International – The Foundation for Electrical Construction* for the project “A Systematic Approach for the Assessment of Green Opportunities for Electrical Contractors,” July 2012
- *Finalist for the Early Career Award from the ELECTRi International – The Foundation for Electrical Construction* for the project “Business Feasibility Analysis of Electrical Retrofit Projects,” July 2011

- The *2011 Best Paper Award*, The 47th Annual International Conference of the Associated Schools of Construction (ASC), Omaha, NE, April 2011
- *Finalist for the 2010 Construction Industry Institute (CII) poster competition*, Orlando, FL, August 3–5, 2010 (Received the Conference Registration Award)
- *Finalist for the 2009 Construction Industry Institute (CII) poster competition*, Reno, NV, July 28–30, 2009 (Received the Conference Registration Award)
- *National Science Foundation (NSF) Student Scholarship*, May 2005
- *Design-Build Institute of America (DBIA) Student Scholarship*, December 2003
- *Building Construction Alumni Graduate Fellowship*, May 2003

B. Professional Certifications

- *Decision & Risk Management Professional (DRMP) Designation*, The Association for the Advancement of Cost Engineering (AACE) International, The Authority for Total Cost Management, October 2014
- *Certified Cost Professional (CCP) Designation*, The Association for the Advancement of Cost Engineering (AACE) International, The Authority for Total Cost Management, January 2014
- *DBIA Designation*, The Design-Build Institute of America (DBIA), December 2011
- *Certified DBIA Instructor*, August 2013

C. School/Institute Awards

- *2020-2021 Cohort of the Office of Provost's Emerging Leaders Program*, June 2020–Present
- *2019 Service Award*, Georgia Institute of Technology, April 18, 2019
- *Brook Byers Institute for Sustainable Systems (BBISS) Fellow*, June 2015–Present
- *Inaugural Class of Climate Change Fellow*, The Georgia Tech Global Change Program, Spring 2018
- *Energy Systems for Sustainable Communities (ESSC) Fellow*, The Georgia Tech Center for Serve-Learn-Sustain (SLS), Fall 2017
- *Thank-a-Teacher Certificate of Recognition*, The Georgia Tech Center for Teaching and Learning (CTL), May 2019, December 2018, December 2017, and December 2009
- *Faculty Staff Development Opportunity Grant Recipient* from the Georgia Tech Center for Serve-Learn-Sustain (SLS) to participate in the Association for the Advancement of Sustainability in Higher Education (AASHE) "Sustainability across the Curriculum" Leadership Workshop, Emory University, Atlanta, GA, January 7–8, 2016
- *Food, Energy, Water Systems (FEWS) Fellow*, The Georgia Tech Center for Serve-Learn-Sustain (SLS), Fall 2016
- *Public Service Pathway Award* for the project "Sustainable Development of Construction Megaprojects through Community Engagement" incorporated in CEE 4150 Construction Management and Megaprojects, The Georgia Tech Center for Serve-Learn-Sustain (SLS), December 4, 2015
- *Class of 1969 Teaching Fellow*, The Georgia Tech Center for Teaching and Learning (CTL), May 2010

IV. Research, Scholarship, and Creative Activities

A. Published Books, Book Chapters, and Edited Volumes

A1. Books

- 1) *Proceedings of ASCE Construction Research Congress 2014: Construction in a Global Network, *Construction Institute (CI) of the American Society of Civil Engineers (ASCE)*, Daniel Castro-Lacouture, Javier Irizarry, and Baabak Ashuri (Eds.), Atlanta, GA, May 19–21, 2014, 2405 pp.

A2. Refereed Book Chapters

- 2) *Preface of the Proceedings of ASCE Construction Research Congress 2014: Construction in a Global Network, *Construction Institute (CI) of the American Society of Civil Engineers (ASCE)*, Daniel Castro-Lacouture, Javier Irizarry, and Baabak Ashuri (Eds.), Atlanta, GA, May 19–21, 2014.
- 3) *Ashuri, B., Rouse W.B., and Augenbroe G. (2007). "Different Models of Work in the Modern Services Enterprise." *Work, Workflow, and Information Systems*, IOS Press, Amsterdam, Netherlands.

B. Refereed Publications and Submitted Articles

B1. Published and Accepted Journal Articles

- 1) ***Liang, Y.**, and Ashuri, B. (2021). "Challenges and Enabling Features of Small and Medium Infrastructure Public-Private Partnerships: A Case Study of The U.S. P3 Infrastructure Market." *Engineering, Construction and Architectural Management*. Accepted.
- 2) ***Jallan, Y.**, and Ashuri, B. (2020). "Text Mining of the Securities and Exchange Commission Financial Filings of Publicly traded Construction Firms using Deep Learning to Identify and Assess Risk." *ASCE Journal of Construction Engineering & Management*. Accepted.
- 3) ***Liang, Y.**, Ashuri, B., and **Li, M.** (2020). "Forecasting the Construction Expenditure Cash Flow for Transportation Design-Build Projects with a Case-Based Reasoning Model." *ASCE Journal of Construction Engineering & Management*. Accepted.
- 4) ***Li, M.**, Baek, M., and Ashuri, B. (2020). "Forecasting Ratio of Low Bid to Owner's Estimate for Highway Construction." *ASCE Journal of Construction Engineering & Management*. Accepted.
- 5) ***Singh, P.**, Ashuri, B., and Amekudzi-Kennedy, A. (2020). "Application of Dynamic Adaptive Planning and Risk-Adjusted Decision Trees to Capture the Value of Flexibility in Resilience and Transportation Planning." *Transportation Research Record: Journal of Transportation Research Board*. National Academy of Sciences: Transportation Research Board. 2674(9), 298-310.
- 6) *Alkaissy, M., Arashpour, M., Ashuri, B., Bai, Y., Hosseini, R. (2020). "Safety management in construction: 20 years of risk modeling." *Safety Science*, 129, September 2020, 104805.
- 7) ***Liang, Y.**, and Ashuri, B. (2020). "The Option Value of Contingent Finance Support in Transportation Public-Private Partnership Projects." *Transportation Research Record: Journal of Transportation Research Board*. National Academy of Sciences: Transportation Research Board. 2674(7): 555–565.
- 8) *Cao, Y., and Ashuri, B. (2020). "Predicting the Volatility of Highway Construction Cost Index Using Long Short-Term Memory." *ASCE Journal of Management in Engineering*. 36(4): 04020020.

- 9) ***Lee, J.H., Zhou, Y.,** and Ashuri, B. (2020). "Key Challenges to Design Professional Liability in the Design–Build Environment." *ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*. 12(3): 04520031.
- 10) *Shirazi, A., and Ashuri, B. (2020). "Embodied Life Cycle Assessment (LCA) Comparison of Residential Building Retrofit Measures in Atlanta." *Elsevier Journal of Building and Environment*. 171(15) March 2020, 106644.
- 11) ***Liang, Y.,** Ashuri, B., and Sun, W. (2019). "Analysis of the Variability of Project Cost and Schedule Performance in the Design–Build Environment." *ASCE Journal of Construction Engineering & Management*. 146(6): 04020060.
- 12) *Baek, M., and Ashuri, B. (2019). "Analysis of the Variability of Submitted Unit Price Bids for Asphalt Line Items in Highway Projects." *ASCE Journal of Construction Engineering & Management*, 145(4): 04019020.
- 13) ***Lee, J.H., Jallan, Y.,** and Ashuri, B. (2019). "Key Issues and Differences in Practical Components of Quality Management in Design–Build Highway Projects." *ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 12(1), 04519029.
- 14) *Ashuri, B., **Wang, J.,** Shahandashti, M., and Baek, M. (2019). "A Data Envelopment Analysis (DEA) Model for Building Energy Benchmarking," *Journal of Engineering, Design and Technology*, 17(4), 747–768.
- 15) ***Jallan, Y.,** Brogan, E., Ashuri, B., and Clevenger, C. (2019). "Application of Natural Language Processing and Text Mining to Identify Patterns in Construction Defect Litigation Cases." *ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*. 11(4): 04519024.
- 16) *Zhang, L., Wu, X., Liu, M., Liu, W., and Ashuri, B. (2019). "Discovering Worst Fire Scenarios in Subway Stations: A Simulation Approach." *Automation in Construction*, 99, March 2019, 183–196.
- 17) *Ashuri, B., Amekudzi-Kennedy, Adjo, **Amoaning-Yankson, S., Liang, Y.,** and **Cao, Y.** (2019). "Strategies and Resources for Utilizing Disadvantaged Business Enterprises in Design–Build Projects." *ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 11(4), 04519022.
- 18) *Shahandashti, M., Ashuri, B., Masoumi, R., Touran A., and Minchin, E. (2018). "Construction Portfolio Performance Management Using Key Performance Indicators." *CIB Journal for the Advancement of Performance Information and Value*, 10(2) 87–103.
- 19) *Kingsley, G., Rogers, J., Matisoff, D., An, Y., **Mistur, E.,** and Ashuri, B. (2018). "The Influence of Task Complexity in Shaping Environmental Review and Engineering Design Durations." *ASCE Journal of Management in Engineering*, 34(6), November 2018.
- 20) ***Li, M.,** and Ashuri, B. (2018). "Neighborhood Racial Composition, Neighborhood Wealth, and the Surrounding Food Environment in Fulton County, GA." *Applied Geography*, 97, 119–127.
- 21) ***Shirazi, A.,** and Ashuri, B. (2018). "Embodied Life Cycle Assessment Comparison of Single Family Residential Houses Considering the 1970s Transition in Construction Industry: Atlanta Case Study." *Elsevier Journal of Building and Environment*, 140, 55–67.
- 22) ***Cao, Y.,** Ashuri, B., and **Baek, M.,** (2018). "Prediction of Unit Price Bids of Resurfacing Highway Projects through Ensemble Machine Learning." *ASCE Journal of Computing in Civil Engineering*, 32(5), September 2018, DOI: 10.1061/(ASCE)CP.1943-5487.0000788.
- 23) *Zhang, L., and Ashuri, B. (2018). "BIM Log Mining: Discovering Social Networks." *Automation in Construction*, 91, July 2018, 31–43.

- 24) ***Baek, M.**, and Ashuri, B. (2018). "Profile Monitoring for Examining Impact of Hurricanes Katrina and Rita on Highway Construction Cost." *Transportation Research Record (TRR), Journal of the Transportation Research Board*, 0361198118777619. <https://doi.org/10.1177/0361198118777619>.
- 25) *Shahandashti, M., Ashuri, B., and Mostaan, K. (2018). "Automatic Fault Detection for Building Integrated Photovoltaic (BIPV) Systems Using Time Series Methods." *Built Environment Project and Asset Management*, 8(2), 160–170.
- 26) *Zhang, R., Ashuri, B., Shyr, Y., and Deng, Y. (2018). "Forecasting Construction Cost Index Based on Visibility Graph: A Network Approach." *Physica A: Statistical Mechanics and its Applications*, 493, 1 March 2018, 239–252.
- 27) *Zhang, L., **Li, Y.**, **Stephenson, R.**, and Ashuri, B. (2018). "Valuation of Energy Efficient Certificates in Buildings." *Energy and Buildings*, 158, 1 January 2018, 1226–1240.
- 28) *Zhang, L., **Wen, M.**, and Ashuri, B. (2018). "BIM Log Mining: Measuring Design Productivity." *ASCE Journal of Computing in Civil Engineering*, January 2018, 32(1).
- 29) ***Ilbeigi, M.**, Ashuri, B., and Joukar, A. (2017). "Time-Series Analysis for Forecasting Asphalt-Cement Price." *ASCE Journal of Management in Engineering*, 33(1), 04016030.
- 30) ***Mostaan, K.**, and Ashuri, B. (2017). "Challenges and Enablers for Private Sector Involvement in Delivery of Highway Public–Private Partnerships in the United States." *ASEC Journal of Management in Engineering*, 33(3), May 2017, 04016047.
- 31) *Abediniangerabi, B., Shahandashti, S.M., Ahmadi Esfahani, N., and Ashuri, B. (2017). "Empirical Analysis of Temporal Relationship Between Architectural Billing Index (ABI) and Construction Spending Using Time Series Methods." *ASCE Journal of Construction Engineering and Management*, 143(10), October 2017.
- 32) *Zhang, R., Ashuri, B., and Deng, Y. (2017). "A Novel Method for Forecasting Time Series Based on Fuzzy Logic and Visibility Graph." *Advanced Data Analysis Classification*, 11(4), December 2017, 759–783.
- 33) *Shahandashti, M., Ashuri, B., and Tavakolan, M. (2017). "Synthesis of Methods and Measures for Determining Value of Transportation Research." *CIB Journal for the Advancement of Performance Information and Value*, 9(1), 78–95.
- 34) ***Wang, J.**, and Ashuri, B. (2017). "Predicting ENR Construction Cost Index Using Machine Learning Algorithms." *International Journal of Construction Education and Research*, 13(1), 47–63.
- 35) ***Reisi Gahrooei, M.**, **Zhang, Y.**, Ashuri, B., and Augenbroe, G. (2016). "Timing Residential Photovoltaic Investments in the Presence of Demand Uncertainties." *Sustainable Cities and Society*, 20, 109–123.
- 36) ***Shahandashti, S.M.**, and Ashuri, B. (2016). "Highway Construction Cost Forecasting Using Vector Error Correction Models." *ASCE Journal of Management in Engineering*, 32(2), 04015040.
- 37) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2016). "Price Adjustment Clauses and Submitted Bid Prices for Major Asphalt Line Items in Highway Projects." *ASCE Journal of Construction Engineering and Management*, 142(5), May 2016, 04015103 (Winner of the 2017 ASCE Thomas Fitch Rowland Award).
- 38) ***Yarmohammadi, S.**, and Ashuri, B. (2015) "Exploring the approaches in the implementation of BIM-based MEP coordination in the USA." *Journal of Information Technology in Construction (ITcon)*, 20, 347–363.
- 39) *Ashuri, B., and **Mostaan, K.** (2015). "State of Private Financing in Development of Highway Projects in the United States." *ASEC Journal of Management in Engineering*, 04015002.

- 40) ***Kashani, H.**, Ashuri, B., **Shahandashti, S.M.**, and **Lu, J.** (2015). "An Investment Valuation Model for Renewable Energy Systems in Buildings." *ASCE Journal of Construction Engineering and Management*, 141(2), 04014074.
- 41) *Ashuri, B., and Tavakolan, M. (2015). "Shuffled Frog-Leaping Model for Solving Time–Cost–Resource Optimization (TCRO) Problems in Construction Project Planning." *ASCE Journal of Computing in Civil Engineering*, 29(1), 04014026.
- 42) ***Sedehi, A.**, Roper, K., and Ashuri, B. (2015). "A Cost-Benefit Case for RFID Implementation in Hospitals: Adapting to Industry Reform." *Facilities*, 33(5/6), 367–388.
- 43) ***Shahandashti, S.M.**, and Ashuri, B. (2013). "Forecasting ENR Construction Cost Index Using Multivariate Time Series Models." *ASCE Journal of Construction Engineering and Management*, 139(9), 1237–1243.
- 44) *Kim, D.Y., Han, S.H., and Ashuri, B. (2013). "Financial Valuation of Investments in International Construction Markets: A Real Options Approach for Market Entry Decision Making." *ASEC Journal of Management in Engineering*, 29(4), 355–368.
- 45) *Ashuri, B., **Kashani, H.**, **Lu, J.**, and **Shahandashti, S.M.** (2013). "Investment in Solar Energy: An Alternative Approach." *Royal Institution of Chartered Surveyors (RICS) Land Journal*, September/October 2013, 20.
- 46) *Ashuri, B., **Shahandashti, S.M.**, and **Lu, J.** (2012). "Empirical Tests for Identifying Leading Indicators of ENR Construction Cost Index." *Construction Management and Economics*, 30(11), 917–927.
- 47) *Ashuri, B., and Tavakolan, M. (2012). "A Fuzzy Enabled Hybrid Genetic Algorithm-Particle Swarm Optimization Approach to Solve Time-Cost-Resource Optimization (TCRO) Problems in Construction Project Planning." *ASCE Journal of Construction Engineering and Management*, 138(9), 1065–1074.
- 48) *Ashuri, B., **Kashani, H.**, Molenaar, K.R., Lee, S., and **Lu, J.** (2012). "A Risk-neutral Pricing Approach for Evaluating BOT Highway Projects with Government Minimum Revenue Guarantee Options." *ASCE Journal of Construction Engineering and Management*, 138(4), 545–557.
- 49) *Ashuri, B., **Lu, J.**, and **Kashani, H.** (2011). "A Real Options Framework to Evaluate Investments in Toll Road Projects Delivered under the Two-Phase Development Strategy." *Built Environment Project and Asset Management*, 1(1), 14–31 (Highly Commended Award Winner at the Emerald Literati Network Awards for Excellence 2012).
- 50) *Ashuri, B., and **Lu, J.** (2010). "Time Series Analysis of ENR Construction Cost Index." *ASCE Journal of Construction Engineering and Management*, 136(11), 1227–1237.
- 51) ***Fard, J.**, Kangari, R., and Ashuri, B. (2010). "The Effects of Organizational Variables on Hospital Costs in Georgia." *International Journal of Facility Management*, 1(2), 1–21.
- 52) *Ashuri, B. (2010). "Valuation of Flexible Leases for Corporate Tenants Facing Uncertainty in Their Required Workspace." *International Journal of Strategic Property Management*, 14(1), 49–72.
- 53) ***Durmus-Pedini, A.**, and Ashuri, B. (2010). "An Overview of the Benefits and Risk Factors of Going Green in Existing Buildings." *International Journal of Facility Management*, 1(1), 1–15.
- 54) Ashuri, B., Rouse W.B., and Augenbroe, G. (2007). "Different Models of Work in the Modern Services Enterprise." *Information – Knowledge – Systems Management*, 6(1), 25–59.
- 55) Mofid, M., Alizadegan. R., Ashuri, B., and Yavari, A. (2001). "Computing the Kern of a General Cross-section." *Advances in Engineering Software*, 32(12), 949–955.

B2. Conference Presentation with Proceedings (Refereed)

- 56) ***Liang, Y.**, and Ashuri, B. (2020). "Analysis on the Obstacles of Implementing Small and Medium Public–Private Partnership for the U.S. Infrastructure Development." *The 2020 ASCE Construction Research Congress (CRC)*, Tempe, AZ, March 8–10, 2020.
- 57) *Ashuri, B., **Lee, J.H.**, and **Zhou, Y.** (2019). "Key Challenges Related to the Design Professional Liability in the Transportation Design-Build Environment." *ASCE Construction Institute (CI) Summit*, Los Angeles, CA, February 20-22, 2020.
- 58) ***Singh, P.**, Ashuri, B., and Amekudzi-Kennedy, A. (2019). "Application of Dynamic Adaptive Planning and Risk-Adjusted Decision Trees to Capture the Value of Flexibility in Resilience and Transportation Planning." *The 2nd International Conference on Transportation System Resilience to Natural Hazards and Extreme Weather Events*, Washington, DC, November 13–15, 2019.
- 59) *Shirazi, A., Bozorgi, A., and Ashuri, B. (2019). "A Cost Benefit Analysis of Retrofitting Public Policies on Atlanta Residential Housing." *AUBEA Conference 2019*, Noosa, QLD, Australia, November 6–8, 2019.
- 60) ***Singh, S.**, and Ashuri, B. (2019). "Leveraging Blockchain Technology in AEC Industry during Design Development Phase." *The 2019 ASCE International Conference on Computing in Civil Engineering*, Atlanta, GA, June 17–19, 2019.
- 61) ***Liang, Y.**, Ashuri, B., and Sun, W. (2019). "Identifying Patterns in Design–Build Projects in Terms of Project Cost Performance." *The 2019 ASCE International Conference on Computing in Civil Engineering*, Atlanta, GA, June 17–19, 2019.
- 62) *Al-Kaissy, M., Arashpour, M., Fayezi, S., Nezhad, A., and Ashuri, B. (2019). "Process Modelling in Civil Infrastructure Projects: A Review of Construction Simulation Methods." *ISARC. Proceedings of the International Symposium on Automation and Robotics in Construction*, 36, 368–375. Waterloo: IAARC Publications. DOI:10.22260/ISARC2019/0050, Banff, AB, Canada, May 21–24, 2019.
- 63) *Baek, M., and Ashuri, B. (2019) "Assessing Low Bid Deviation from Engineer's Estimate in Highway Construction Projects." *The 55th Associated Schools of Construction (ASC) Annual International Conference Proceedings*, Denver, CO, April 10–13, 2019.
- 64) ***Jallan, Y.**, Brogan, E., Ashuri, B., and Clevenger, C. (2019). "Application of Natural Language Processing and Text Mining to Identify Patterns in Construction Defect Litigation Cases." *ASCE Construction Institute (CI) Summit*, Atlanta, GA, March 7–9, 2019.
- 65) *Zhang, L., and Ashuri, B. (2018). "Monitoring Design Productivity Through Process Mining of BIM Log Data." *Proceedings of the 18th International Conference on Construction Applications of Virtual Reality (CONVR 2018)*, Auckland, New Zealand, 22–23 November 2018.
- 66) ***Baek, M.**, and Ashuri, B. (2018) "Assessment of Spatial Correlation Patterns of Unit Price Bids and External Factors." *The 54th Associated Schools of Construction (ASC) Annual International Conference Proceedings*, Minneapolis, MN, April 18–21 2018.
- 67) ***Jallan, Y.**, **Lee, J.H.**, and Ashuri, B. (2018). "Synthesis of Quality Assurance Practices of State DOTs for Highway Construction Projects using Alternative Delivery." *2018 Construction Research Congress*, ASCE, New Orleans, LA, April 2–4, 2018.
- 68) ***Baek, M.**, and Ashuri, K. (2018). "Statistical Modeling of Number of Bidders in Highway Resurfacing and Widening Construction Projects." *2018 Construction Research Congress*, ASCE, New Orleans, LA, April 2–4, 2018.
- 69) *Zhang, L., and Ashuri, K. (2018). "Exploring Collaborative Networks in BIM Design Based on Event Logs." *2018 Construction Research Congress*, ASCE, New Orleans, LA, April 2–4, 2018.

- 70) ***Shirazi, A.,** and Ashuri, B. (2018). "Life Cycle Energy and Carbon Analysis of Single Family Residential Buildings: Atlanta Case Study." *2018 Construction Research Congress*, ASCE, New Orleans, LA, April 2–4, 2018.
- 71) ***Tähkämö, L.,** Ashuri, B., and Frischmann, C. (2017). "Reducing Carbon Dioxide Emissions by Global Transition to LED Lighting in Residential Buildings." *9th International Conference on Energy Efficiency in Domestic Appliances and Lighting*, Irvine, CA, September 2017.
- 72) ***Baek, M.,** and Ashuri, K. (2017). "Spatial Regression Analysis for Modeling the Spatial Variation in Highway Construction Costs". *The 9th International Structural Engineering and Construction (ISEC) Conference*, Valencia, Spain, July 24–29, 2017.
- 73) ***Cao, Y.,** and Ashuri, B. (2017). "Long Term Change Pattern Analysis of Bidding Price Based on Non-Parametric Framework." *2017 International Workshop on Computing in Civil Engineering (IWCCE)*, Seattle, WA, June 25–27, 2017.
- 74) ***Amoaning-Yankson, S.,** Amekudzi-Kennedy, A., **Cao, Y.,** and Ashuri, B. (2017). "Effective Strategies and Resources for Utilizing Disadvantaged Business Enterprises in Design Build Projects." *Transportation Research Board (TRB) 96th Annual Meeting*, Washington, DC, January 8–12, 2017.
- 75) ***Toroghi, S.H.,** Ashuri, B., Guhathakurta, S., and Green Leigh, N. (2016). "Towards a Resilient Neighborhood: Examining The Role of Transit Oriented Development (TOD) And On-Site Solar Potential for Improving Neighborhood Energy Security." *International Conference on Sustainable Infrastructure (ICSI 2016)*, Shenzhen, P.R. China, Oct 17–19, 2016.
- 76) ***Toroghi, S.H., Li, M.,** and Ashuri, B. (2016). "An Automated GIS based Piezoelectric Potential Assessment: PE Calculator[®]." *33rd International Symposium on Automation and Robotics in Construction (ISARC 2016)*, Auburn, AL, July 18–21, 2016.
- 77) ***Yarmohammadi, S., Pourabolghasem, R., Shirazi, A.,** and Ashuri, B. (2016). "A Sequential Pattern Mining Approach to Extract Information from BIM Design Log Files." *33rd International Symposium on Automation and Robotics in Construction (ISARC 2016)*, Auburn, AL, July 18–21, 2016.
- 78) ***Mostaan, K.,** and Ashuri, B. (2016). "Recommended Opportunities for the Development of Highway Public–Private Partnership Projects in the United States." *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016.
- 79) ***Ilbeigi, M.,** Joukar, A., and Ashuri, B. (2016). "Modeling and Forecasting the Price of Asphalt Cement Using Generalized Auto Regressive Conditional Heteroscedasticity." *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016.
- 80) ***Baek, M., Mostaan, K.,** and Ashuri, B. (2016). "Recommended Practices for the Cost Control of Highway Project Development." *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016.
- 81) ***Wang, J.,** and Ashuri, B. (2016). "Predicting ENR'S Construction Cost Index Using the Modified K Nearest Neighbors (KNN) Algorithm." *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016, 2502–2509.
- 82) ***Ilbeigi, M.,** and Ashuri, B. (2016). "Financial Valuation of Material Price Adjustment Clauses." *The 52nd ASC Annual International Conference Proceedings*, Brigham Young University, Provo, UT, April 13–16, 2016.
- 83) ***Ilbeigi, M.,** Ashuri, B., and **Kashani, H.** (2016). "A Real Option Approach for Financial Valuation of Material Price Adjustment Clauses in Transportation Projects." *Transportation Research Board 95th Annual Meeting*, Washington, DC, January 10–14, 2016.
- 84) ***Wang, J.,** and Ashuri, B. (2015). "Predicting ENR Construction Cost Index Using the Modified K Nearest Neighbor (KNN) Algorithm." *Proceedings of the 5th International/11th*

- Construction Specialty Conference (ICSC15)*, University of British Columbia, Vancouver, Canada, June 8–10, 2015.
- 85) *Masoumi, R., Ashuri, B., Minchin, E., Shahandashti, M., and Touran, A. (2015). "State of Practice in Portfolio Management: A Comprehensive Survey." *Proceedings of the 5th International/11th Construction Specialty Conference (ICSC15)*, University of British Columbia, Vancouver, Canada, June 8–10, 2015.
 - 86) ***Ilbeigi, M., Shayegh, S., Mostaan, K.**, and Ashuri, B. (2015) "A Quantitative Approach for Analyzing Material Price Effects on Bid Prices of Highway Projects." *The 51st ASC Annual International Conference Proceedings*, College Station, TX, April 22–25, 2015.
 - 87) *Shahandashti, M., Ashuri, B., and Tavakolan, M. (2015) "Synthesis of Best Practices for Determining Value of Transportation Research on Safety and Environmental Sustainability." *The 51st ASC Annual International Conference Proceedings*, College Station, TX, April 22–25, 2015.
 - 88) ***Mostaan, K.**, and Ashuri, B. (2015). "Challenges and Enabling Mechanisms for Development of Highway Public–Private–Partnerships." *56th Annual Transportation Research Forum*, Atlanta, GA, March 12–14, 2015.
 - 89) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2015). "A Data Mining Approach for Analyzing the Effects of Price Adjustment Clauses on Bid Prices Considering Material Quantity and Projects Size," *Transportation Research Board 94th Annual Meeting*. Washington, DC, January 11–15, 2015.
 - 90) *Ashuri, B., **Yarmohammadi, S.**, and **Shahandashti, M.** (2014). "A Critical Review of Methods Used to Determine Productivity of Mechanical, Electrical, and Plumbing Systems Coordination." *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
 - 91) ***Ilbeigi, M.**, and Ashuri, B. (2014). "A Stochastic Process to Model the Fluctuations of Asphalt Cement Price." *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
 - 92) ***Lu, J.**, Ashuri, B., and **Shahandashti, M.** (2014). "A Data Envelope Analysis Models for Building Energy Efficiency Benchmarking." *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
 - 93) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2014). "Empirical Study of Impact of Price Adjustment Clauses (PACs) on Highway Construction Bid." *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
 - 94) ***Quintanilla, N., Shahandashti, M.**, Goodman, J., Wren, M., Yarmohammadi, S., and Ashuri, B. (2014). "Time and Motion Study for Solar Contractors." *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
 - 95) ***Hannon, D., Mostaan, K.**, and Ashuri, B. (2014). "Challenges and Opportunities in Environmental Planning and Permitting on Transportation Design–Build Projects." *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
 - 96) ***Hannon, D.**, and Ashuri, B. (2014). "Potential Best Practices in Design–Build Environmental Planning and Permitting." *2014 DBIA Design-Build in Transportation*, San Jose Convention Center, San Jose, CA, March 19–21, 2014.
 - 97) *Ashuri, B., **Ilbeigi, M.**, and **Hui, Y.** (2013). "Modeling and Forecasting Fluctuations of Asphalt Cement Price Index." *The Seventh International Structural Engineering and Construction Conference (ISEC-7)*, Honolulu, HI, June 18–24, 2013.
 - 98) *Ashuri, B., and **Mostaan, K.** (2013). "Challenges and Opportunities for Expediting Delivery of Design–Build Projects." *The Southeast University Transportation Center (UTC) Conference*, Orlando, FL, April 4–5, 2013.

- 99) *Ashuri, B., **Ilbeigi, M.**, and **Hui, Y.** (2013). "Development of Risk Management Strategies for State DOTs to Effectively Deal with Volatile Prices of Transportation Construction Materials." *The Southeast University Transportation Center (UTC) Conference*, Orlando, FL, April 4–5, 2013.
- 100) ***Shahandashti, S.M.**, and Ashuri, B. (2013). "Forecasting Construction Cost Index Using Energy Price as an Explanatory Variable." *The 49th ASC Annual International Conference Proceedings*, California Polytechnic State University, San Luis Obispo, CA, April 9–13, 2013.
- 101) ***Shahandashti, S.M.**, **Mostaan, K.**, and Ashuri, B. (2013). "Methods for Assessing Longitudinal Variations of Energy Productions by PV Systems." *Proceedings of Architectural Engineering Conference 2013*, 113–122, State College, PA, April 3–5, 2013.
- 102) *Ashuri, B., **Kashani, H.**, **Lu, J.**, and **Shahandashti, S.M.** (2012). "Investments in Building Solar Energy Systems: Finding Proper Intervention Time." *Royal Institution of Chartered Surveyors Construction, Building and Real Estate Conference (2012 RICS COBRA)*, Las Vegas, NV, September 11–13, 2012.
- 103) *Tavakolan, M., and Ashuri, B. (2012). "Simulation of Absorptive Capacity Impact on the Performance of Project Networks Learning." *AEC 2012; 7th International Conference on Innovation in Architecture, Engineering and Construction*, Sao Paulo, Brazil, August 15–17, 2012.
- 104) ***Shahandashti, S.M.**, and Ashuri, B. (2012). "Forecasting Construction Cost Index in the United States Using Bivariate Vector Error Correction Models." *Management of Construction: Research to Practice (MCRP) CIB Conference*, Montreal, Canada, June 26–29, 2012.
- 105) *Ashuri, B., **Shahandashti, S.M.**, and **Lu, J.** (2012). "Is the information available from historical time series data on economic, energy, and construction market variables useful to explain variations in ENR Construction Cost Index?" *2012 Construction Research Congress*, ASCE, Purdue University, West Lafayette, IN, May 21–23, 2012.
- 106) *Tavakolan, M., Ashuri, B., Tavakolan, R., and Farshchian, M.M. (2012). "Long Term Concessions on Public–Private-Partnership Projects, How to Make This Right?" *2012 Construction Research Congress*, ASCE, Purdue University, West Lafayette, IN, May 21–23, 2012.
- 107) ***Kashani, H.**, Ashuri, B., **Lu, J.**, and **Shahandashti, S.M.** (2012). "A Real Options Model to Evaluate Investments in Photovoltaic (PV) Systems." *2012 Construction Research Congress*, ASCE, Purdue University, West Lafayette, IN, May 21–23, 2012.
- 108) *Tavakolan, M., and Ashuri, B. (2012). "Stochastic Optimization of Construction Projects Planning with Genetic Algorithm" *2012 Construction Research Congress*, ASCE, Purdue University, West Lafayette, IN, May 21–23, 2012.
- 109) *Tavakolan, M., and Ashuri, B. (2012). "Development of Fuzzy Enabled Shuffled Frog Leaping Algorithm with Activity Splitting Allowed in Construction Project Scheduling." *2012 Construction Research Congress*, ASCE, Purdue University, West Lafayette, IN, May 21–23, 2012.
- 110) ***Shahandashti, S.M.**, and Ashuri, B. (2012). "Quantifying the Relationship between Construction Cost Index and Macroeconomic Factors in the United States." *Associated Schools of Construction International Proceedings of the 48th Annual International Conference*, Birmingham, UK, April 11–14, 2012.
- 111) *Tavakolan, M., and Ashuri, B. (2012). "Comparison of Evolutionary Algorithms in Non-Dominated Solutions of Time-Cost-Resource Optimization Problem." *The 48th ASC Annual International Conference Proceedings*, Birmingham City University, April 11–14, 2012.

- 112) *Ashuri, B., **Lu, J.**, Wang, X.Q., and **Kashani, H.** (2012). "Optimal Timing of Investment in Highway Expansion." *The Transportation Research Board 91st Annual Meeting*, Washington, DC, January 22–26, 2012.
- 113) ***Kashani, H.**, and Ashuri, B. (2011). "Selection of the Design–Build (DB) Project Delivery System for Georgia Department of Transportation (GDOT) Projects: Identification of Driving Factors." *Proceedings of the 2011 Engineering Project Organizations Conference*, Estes Park, CO, August 9–11, 2011.
- 114) *Tavakolan, M., Ashuri, B., and Chiara, N. (2011). "Development of Scheduling with Hybrid Genetic Algorithm–Particle Swarm Optimization." *2011 CSCE Annual Conference, 3rd International/9th Construction Specialty Conference*, Ottawa, Canada, June 14–17, 2011.
- 115) *Tavakolan, M., Ashuri, B., and Chiara, N. (2011). "Applying the Shuffled Frog-Leaping Algorithm to Improve Scheduling of Construction Projects with Activity Splitting Allowed." *Int. Conference on Management Innovation Sustainable Built Environment*, Amsterdam, June 20–22, 2011.
- 116) *Ashuri, B., **Kashani, H.**, and **Lu, J.** (2011). "A Real Options Approach to Evaluating Investment in Solar Ready Buildings." *The 2011 ASCE Workshop of Computing in Civil Engineering* organized by University of Florida and Florida International University, Miami Beach Resort, Miami, FL, June 19–22, 2011.
- 117) *Ashuri, B., **Kashani, H.**, and **Lu, J.** (2011). "An Investment Analysis Framework for Energy Retrofit in Existing Buildings." *The 47th ASC Annual International Conference Proceedings*, Omaha, NE, April 6–9, 2011 (*ASC – 2011 Best Paper Award*).
- 118) *Ashuri, B., and **Lu, J.** (2010). "Forecasting Construction Cost Index in the United States." *COBRA 2010 The Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors*, Dauphine Université, Paris, France, 2–3 September 2010.
- 119) *Ashuri, B., **Kashani, H.**, and **Lu, J.** (2010). "Financial Valuation of Risk and Revenue Sharing Options in Build–Operate–Transfer (BOT) Highway Projects." *Working Paper Series: Proceedings of the Engineering Project Organization Conference*, J. Taylor and P. Chinowsky, Eds., South Lake Tahoe, CA, Nov. 4–6, 2010.
- 120) ***Kolahdoozan, S.**, and Ashuri, B. (2010). "Life Cycle Cost Analysis of Hybrid HVACs under Utility Price Uncertainty: A Real Option Approach." *The 6th International Conference on Innovation in Architecture, Engineering and Construction (AEC)*, Pennsylvania State University, University Park, PA, June 9–11, 2010.
- 121) ***Lu, J.**, and Ashuri, B. (2010). "A Real Options Valuation Model of Highway Project under Multistage Construction Mode." *The 6th International Conference on Innovation in Architecture, Engineering and Construction (AEC)*, Pennsylvania State University, University Park, PA, June 9–11, 2010.
- 122) *Ashuri, B., and **Kashani, H.** (2010). "A Valuation Model for Choosing the Optimal Minimum Traffic Revenue Guarantee (MRG) in a Highway Project: A Real-Option Approach". *The 6th International Conference on Innovation in Architecture, Engineering and Construction (AEC)*, Pennsylvania State University, University Park, PA, June 9–11, 2010.
- 123) *Kim, D.Y., Han, S.H., and Ashuri, B. (2010). "A Financial Market Entry Decision Model for International Construction Business Using Real Option Analysis and Monte Carlo Simulation." *2010 Construction Research Congress*, ASCE, Banff, Alberta, Canada, 1307–1315, May 8–10, 2010.
- 124) *Ashuri, B., and **Lu, J.** (2010). "Forecasting ENR Construction Cost Index: A Time Series Analysis Approach." *2010 Construction Research Congress*, ASCE, Banff, Alberta, Canada, 1345–1355, May 8–10, 2010.

- 125) ***Kolahdoozan, S.**, and Ashuri, B. (2010). "Life Cycle Cost Analysis of Hybrid Chiller Plants under Dynamic Utility Prices." *2010 Construction Research Congress*, ASCE, Banff, Alberta, Canada, 1487–1497, May 8–10, 2010.
- 126) *Ashuri, B., **Kashani, H.**, Molenaar, K.R., and **Lee, S.** (2010). "A Valuation Model for Choosing the Optimal Minimum Revenue Guarantee (MRG) in a Highway Project: A Real-Option Approach." *2010 Construction Research Congress*, ASCE, Banff, Alberta, Canada, 1244–1253, May 8–10, 2010.
- 127) *Ashuri, B., and **Lu, J.** (2010) "Exponential Smoothing Time Series Models for Forecasting ENR Construction Cost Index". *The 46th ASC Annual International Conference Proceedings*, Boston, MA, April 7–10, 2010.
- 128) *Ashuri, B., Augenbroe, G., Chiara, N., and Paredis, C. (2009) "How Can American AEC Firms Get the Lead in Sustainable Building Design? What a Potential Design Leader Should Know About 'Green-Convertible' Buildings." *2009 Specialty Conference Leadership and Management in Construction*, South Lake Tahoe, CA, November 5–7, 2009.
- 129) *Chiara, N., Dong, F., and Ashuri, B. (2009). "Getting the Right Recipe: The Experiences and Challenges of Long-Term PPP Concessions." *2009 Specialty Conference Leadership and Management in Construction*, South Lake Tahoe, CA, November 5–7, 2009.
- 130) *Ashuri, B. (2009). "Issues Related to Partnerships between Academia, Construction Industry, and Public Sector." *International Conference on Construction Research Funding in the XXI Century*, Urbana–Champaign, IL, July 8–10, 2009.
- 131) Ashuri, B., Rouse, W.B., and Bodner, D. (2008). "A Real Options Approach to Investment Decisions in Competitive, Dynamic Retail Markets." *2008 Hawaii International Conference on System Sciences*, Waikoloa, Big Island, HI, January 7–10, 2008.
- 132) Ashuri, B., and Roper, K.O. (2006). "Workspace Decision-making in the Era of Transformation." *2006 International Conference on Construction & Real Estate Management*, Orlando, FL. October 5–6, 2006.
- 133) Ashuri, B., Rouse, W.B., and Augenbroe, G. (2005). "Data Collection Framework for Strategic Workspace Allocation in Knowledge-based Enterprises." *The 2005 American Society of Engineering Management Conference*, Virginia Beach, VA, October 22, 2005.
- 134) Ashuri, B., and Rouse, W.B. (2004). "Framing Strategic Trade Offs between Traditional and Virtual Enterprises and Workplace." *International Federation of Automation Control (IFAC) Conference*, Atlanta, GA, June 14–18, 2004.
- 135) Mofid, M., Ebrahimi, Y., and Ashuri, B. (2002). "On the Secondary Kern of a General Sub-section." *The Second International Conference on Advances in Structural Engineering and Mechanics*, Busan, Korea, August 21–23, 2002.

B3. Other Refereed Material

Research Reports and Guidebooks

- 136) *Amekudzi-Kennedy, A., Clark, R., Ashuri, B., Woodall, B., **Singh, P.**, **Parrillo, T.**, **Rizzi, D.**, and **Tennakoon, M.** (2020). "Inland Flood Risk and Municipal /Regional Resilience in Georgia: Data, Methodology, Case Studies & Recommendations." AT&T Climate Resiliency Community Challenge 2020, December 2020, 114 pp.
- 137) *Ashuri, B., **Chung, F.**, **Zeng, S.**, **Jallan, Y.**, and Baek, M. (2020). "Estimating ROW Acquisition Project Timelines for Major Projects based on Analyzing ROW Acquisition Processes: Phase I." Georgia DOT Research Project RP 18-35, *Georgia Department of Transportation*, Atlanta, Georgia, December 2020. FHWA-GA-21-1835.

- 138) *Ashuri, B., **Liang, Y.**, Baek, M., **Li, M.**, and **Zeng, S.** (2020). "Developing a New Cash Flow Expenditures Model Considering the Flexibilities Offered by the Design-Build-Finance (DBF) and Public-Private Partnership (P3) Project Delivery Methods." Georgia DOT Research Project RP18-13, *Georgia Department of Transportation*, Atlanta, Georgia, December 2020, 111 pp.
- 139) *Ashuri, B., and Sawhney, A. (2020). "Benchmarking in the Infrastructure Sector." *Royal Institution of Chartered Surveyors (RICS)*, London, United Kingdom, 1st edition, August 2020.
- 140) *Ashuri, B., Baek, M., **Shah, R.**, and Kingsley, G. (2020). "Evaluation of Georgia Department of Transportation Office of Program Delivery Project Management Organizational Structure in Comparison to Other States' DOT Practices Tier 1: Best Management Practices (BMPs) of Design-Bid-Build Transportation Program-Project Delivery." Georgia DOT Research Project RP18-12, *Georgia Department of Transportation*, Atlanta, GA, February 2020, 128 pp.
- 141) *Ashuri, B., **Lee, J.H.**, and **Zhou, Y.** (2019). "Emerging Trends in Design Professional Liability Policies in Innovative Project Delivery." Georgia DOT Research Project RP17-34/T.O. No. 2014-72, *Georgia Department of Transportation*, Atlanta, GA, November 2019, 82 pp.
- 142) *Durham, S., Ashuri, B., and Shannon, L. (2018). "Development of Implementation Plan for GDOT E-Construction Program." Georgia DOT Research Project RP17-13, *Georgia Department of Transportation*, Atlanta, GA, November 2018, 86 pp.
- 143) *Ashuri, B., **Moradi, A.**, **Baek, M.**, Kingsley, G., An, H.Y., Zhang, L., **Liang, Y.**, and **Bahrami, S.** (2018). "Guidebook of Risk Mitigation Strategies to Enhance the Delivery of Highway Projects." *The Office of Program Delivery, Georgia Department of Transportation*, Atlanta, GA, September 2018.
- 144) *Crittenden, J., Clark, J., Fujimoto, R., Weissburg, M., and Ashuri, B. (2018). "Final Annual Project Report, RIPS (Resilient Interdependent Infrastructure Processes and Systems) Type 2: Participatory Modeling of Complex Urban Infrastructure Systems (Model Urban SysTems)." *National Science Foundation (NSF), EFRI Office of Emerging Frontiers in Research and Innovation (EFRI), ENG Directorate for Engineering*, September 2018.
- 145) *Ashuri, B., Moradi, A., Baek, M., Kingsley, G., An, H.Y., Zhang, L., Liang, Y., and Bahrami, S. (2018). "Enhancement of the Comprehensive Risk Assessment for Transportation Projects." Georgia DOT Research Project RP16-28, *Georgia Department of Transportation*, Atlanta, GA, September 2018, 159 pp.
- 146) *Ashuri, B., **Moradi, A.**, **Baek, M.**, Kingsley, G., An, H.Y., Zhang, L., **Liang, Y.**, and **Bahrami, S.** (2018). "Risk Mitigation Strategies to Enhance the Delivery of Highway Projects." Georgia DOT Research Project RP16-40, *Georgia Department of Transportation*, Atlanta, GA, September 2018, 168 pp.
- 147) *Ashuri, B., **Jallan, Y.**, and **Lee, J.H.** (2018). "Materials Quality Management for Alternative Project Delivery." Georgia DOT Research Project RP16-22, *Georgia Department of Transportation*, Atlanta, GA, May 2018.
- 148) *Ashuri, B., and **Bahrami, S.** (2017). "Synthesis of the Project Leadership Staffing Needs for Successful Development of Alternative Delivery Programs." Georgia DOT Research Project RP16-17, *Georgia Department of Transportation*, Atlanta, GA, August 2017.
- 149) *Ashuri, B. (2017). "Final Annual Project Report, Valuation of Investments in Building Energy Improvements under Uncertainties." *National Science Foundation (NSF), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), Civil Infrastructure Systems (CIS) Program*, August 2017.
- 150) *Kingsley, G., Matisoff, D., Rogers, R., Ashuri, B., An, Y., **Mistur, E.**, **Ruthotto, I.**, and **Agnew, D.** (2017). "Strategies for Communicating Quality Expectations for Environmental Service

- Contracts.” Georgia DOT Research Project RP15-06, *Georgia Department of Transportation*, Atlanta, GA, March 2017.
- 151) *Ashuri, B., **Baek, M.**, and **Li, Y.** (2017). “Best Practices for Budget-Based Design.” Georgia DOT Research Project RP14-09, *Georgia Department of Transportation*, Atlanta, GA, March 2017.
 - 152) *Ashuri, B., **Cao, Y.**, and **Mostaan, K.** (2017). “Deploying SHRP2 Renewal 10 Guidebook for Project Management Strategies for Complex Projects in the Georgia Department of Transportation.” Georgia DOT Research Project RP15-12, *Georgia Department of Transportation*, Atlanta, GA, January 2017.
 - 153) *Ashuri, B. (2016). “3rd Year Annual Project Report, Valuation of Investments in Building Energy Improvements under Uncertainties.” *National Science Foundation (NSF), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), Civil Infrastructure Systems (CIS) Program*, September 2016.
 - 154) *Crittenden, J., Clark, J., Fujimoto, R., Weissburg, M., and Ashuri, B. (2016). “2nd Year Annual Project Report, RIPS (Resilient Interdependent Infrastructure Processes and Systems) Type 2: Participatory Modeling of Complex Urban Infrastructure Systems (Model Urban SysTems).” *National Science Foundation (NSF), EFRI Office of Emerging Frontiers in Research and Innovation (EFRI), ENG Directorate for Engineering*, September 2016.
 - 155) *Ashuri, B., **Mostaan, K.**, and **Hannon, D.** (2016). “Environmental Analysis and Permitting in Transportation Design–Build Projects.” Transportation Best Practices, Transportation Committee, *Design-Build Institute of America (DBIA)*, Washington, DC.
 - 156) ***Cao, Y.**, and Ashuri, B. (2016). “Labor Productivity Analysis of Subcontractors.” *Digital Building Laboratory (DBL)*, Atlanta, GA, August 2016.
 - 157) *Amekudzi-Kennedy, A., Ashuri, B., **Amoaning-Yankson, S.**, **Cao, Y.**, **Boadi, R.**, **Brodie, S.**, and **Mostaan, K.** (2016). “Effective Utilization of Disadvantaged Business Enterprises (DBE) in Alternative Delivery Projects: Strategies and Resources to Support the Achievement of DBE Goals.” Georgia DOT Research Project RP14-42, *Georgia Department of Transportation*, Atlanta, GA, April 2016.
 - 158) *Ashuri, B., Kingsley, G., Rogers, J., **Reisi, M.**, **Ilbeigi, M.**, **Sung, E.J-Y.**, and **Toroghi, S.H.** (2015). “Streamlining Project Delivery through Risk Analysis.” Georgia DOT Research Project RP13-05, *Georgia Department of Transportation*, Atlanta, GA, September 2015.
 - 159) *Ashuri, B. (2015). “2nd Year Annual Project Report, Valuation of Investments in Building Energy Improvements under Uncertainties.” *National Science Foundation (NSF), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), Civil Infrastructure Systems (CIS) Program*, September 2015.
 - 160) *Crittenden, J., Clark, J., Fujimoto, R., Weissburg, M., and Ashuri, B. (2015). “1st Year Annual Project Report, RIPS (Resilient Interdependent Infrastructure Processes and Systems) Type 2: Participatory Modeling of Complex Urban Infrastructure Systems (Model Urban SysTems).” *National Science Foundation (NSF), EFRI Office of Emerging Frontiers in Research and Innovation (EFRI), ENG Directorate for Engineering*, September 2015.
 - 161) ***YarMohammadi, S.**, and Ashuri, B. (2015). “Sequential Pattern Mining for Design Productivity Assessment.” *Digital Building Laboratory (DBL)*, Atlanta, GA, August 2015.
 - 162) *Ashuri, B., and **YarMohammadi, S.** (2015). “LIVE-C[®] (Lighting Investment Valuation for Electrical Contractors): a VBA/Excel Tool for Cost Estimation and Financial Analysis of Investments in Lighting Upgrade Projects.” *ELECTRI International – The Foundation for Electrical Construction*, January 2015.

- 163) *Ashuri, B., and **Mostaan, K.** (2014). "Innovative Project Delivery Using Alternative Financing Mechanisms: Assessment of Benefits, Costs, and Risks." Georgia DOT Research Project RP13-01, *Georgia Department of Transportation*, Atlanta, GA, December 2014.
- 164) *Ashuri, B., **Ilbeigi, M., Shayegh, S., and Hui, Y.** (2014). "Development of Risk Management Strategies for State DOTs to Effectively Deal with Volatile Prices of Transportation Construction Materials." Georgia DOT Research Project RP12-20, *Georgia Department of Transportation*, Atlanta, GA, June 2014 (Nominated by the Georgia Department of Transportation (GDOT) for the 2014 High Value Research "Sweet Sixteen" Award by the Value of Research Task Force, the American Association of State Highway and Transportation Officials (AASHTO)).
- 165) *Touran, A., Masoumi, R., Ashuri, B., Minchin, E., and **Shahandashti, M.** (2014). "Managing a Portfolio of Projects – Metrics for Improvement." Research Report, Research Team 303, *Construction Industry Institute (CII)*.
- 166) *Ashuri, B., El-Mehalawi, M., Holtzclaw, R., Huang, V., Ikasalo, R., MacGillivray, S., Masoumi, R., Minchin, E., O'Hanlon, C., **Shahandashti, M.**, Tatum, S, Touran, A., Wilson, D., and Wolf, T. (2014). "Managing a Portfolio of Projects – A Playbook for Success." Implementation Resource, Research Team 303, *Construction Industry Institute (CII)*.
- 167) *Ashuri, B. (2014). "1st Year Annual Project Report, Valuation of Investments in Building Energy Improvements under Uncertainties." *National Science Foundation (NSF), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), Civil Infrastructure Systems (CIS) Program*, September 2014.
- 168) ***Yarmohammadi, S.**, and Ashuri, B. (2014). "Best Practices in BIM-based Mechanical–Electrical–Plumbing (MEP) Coordination." *Digital Building Laboratory (DBL)*, Georgia Institute of Technology, Atlanta, GA, August 2014.
- 169) *VanMeter, D., and Ashuri, B. (2014). "How Can Innovative Project Delivery Systems Improve the Overall Efficiency of GDOT in Transportation Project Delivery?" Just the Facts, Research Project Summary RP11-21, *Georgia DOT Research & Development, Office of Materials & Research*, January 2014.
- 170) *Ashuri, B., and **Yarmohammadi, S.** (2013). "Statistical Analysis of Coordination Productivity Dataset." *Turner Construction Company*, August 2013.
- 171) *VanMeter, D., and Ashuri, B. (2013). "RP10-23: Recommended Guide for Next Generation of Transportation Design Build Procurement and Contracting in the State of Georgia." *Annual Implementation Report for GDOT Research Advisory Committee, Office of Research*, August 22, 2013.
- 172) *VanMeter, D., and Ashuri, B. (2013). "RP11-21: How Can Innovative Project Delivery Systems Improve the Overall Efficiency of GDOT in Transportation Project Delivery?" *Annual Implementation Report for GDOT Research Advisory Committee, Office of Research*, August 22, 2013.
- 173) *Ashuri, B., **Shahandashti, S.M.**, and Tavakolan, M. (2013). "Synthesis of Best Practices for Determining Value of Research Results." Final Report LTRC Project No. 12-3PF, *The Southeast Transportation Consortium (STC) and the Louisiana Transportation Research Center (LTRC)*, Baton Rouge, LA, July 2013.
- 174) *Ashuri, B., **Mostaan, K.**, and **Hannon, D.** (2013). "How Can Innovative Project Delivery Systems Improve the Overall Efficiency of GDOT in Transportation Project Delivery?" Georgia DOT Research Project RP11-21, *Georgia Department of Transportation*, Atlanta, GA, April 2013.

- 175) *Ashuri, B., **Kashani, H.**, **Lu, J.**, and **Shahandashti, S.M.** (2013). "Evaluation of Investment in Solar Energy." *Royal Institution of Chartered Surveyors (RICS)*, London, United Kingdom, January 2013.
- 176) *VanMeter, D., and Ashuri, B. (2012). "Recommended Guide for Next Generation of Transportation Design Build Procurement and Contracting in the State of Georgia." Just the Facts, Research Project Summary RP10-23, *Georgia DOT Research & Development, Office of Materials & Research*, November 2012.
- 177) *Ashuri, B., and **Kashani, H.** (2012). "Recommended Guide for Next Generation of Transportation Design Build Procurement and Contracting in the State of Georgia." Georgia DOT Research Project RP10-23, *Georgia Department of Transportation*, Atlanta, GA, September 2012. (Recipient of 2013 High Value Research "Sweet Sixteen" Award by the Value of Research Task Force, American Association of State Highway and Transportation Officials (AASHTO)) & (Selected by the AASHTO's Standing Committee on Highways (SCOH) as the top 5 of the 16 Research (Sweet 16) Projects of high quality across the nation to be presented on October 18, 2013, at the SCOH Technical Meeting).
- 178) *Ashuri, B., and **Lu, J.** (2011). "Multifamily Property Utility Benchmarking Program." *American Utility Management (AUM), Inc.*, Lombard, IL.
- 179) *Ashuri, B., and **Lu, J.** (2010). "Is it possible to forecast the construction costs index in the USA?" *Royal Institution of Chartered Surveyors (RICS)*, London, United Kingdom.

C. Other Publications and Creative Products

C1. Software

- 1) *Ashuri, B., **Zeng, S.**, and **Chung, F.** (2020). "Right-of-way (ROW) Duration Forecasting Tool." An Excel Visual Basic for Application (VBA) Tool developed for the Georgia Department of Transportation (GDOT).
- 2) *Ashuri, B., **Zeng, S.**, and **Liang, Y.** (2020). "Expenditure Cash Flow Forecasting Tool for Design-Build Transportation Projects." An Excel Visual Basic for Application (VBA) Tool developed for the Georgia Department of Transportation (GDOT).
- 3) *Ashuri, B., **Toroghi, S.**, **Ilbeigi, M.**, and **Reisi, M.** (2015). "CRAFT[®]: Comprehensive Risk Assessment for Transportation." A C-SHRP Tool developed for the Georgia Department of Transportation (GDOT).
- 4) *Ashuri, B., and **Yarmohammadi, S.** (2015). "LIVE-C[®]: Business Feasibility Analysis for Lighting Control & Lighting Retrofit Projects." Presented to the members of the Electric Foundation.
- 5) *Ashuri, B., **Yarmohammadi, S.**, **Kashani, H.**, **Mostaan, K.**, and **Reisi, M.** (2013). "GDOT's Next-Gen Design-Build (DB) Assessment Tool." An Excel Visual Basic for Application (VBA) Tool developed for the Georgia Department of Transportation (GDOT).
- 6) *Ashuri, B., **Knapp, T.**, and **Stewart, B.** (2012). "Design-Build (DB) Assessment Tool." A Java Applet developed for the Georgia Department of Transportation (GDOT).
- 7) *Ashuri, B., **Knapp, T.**, and **Stewart, B.** (2012). "Design-Build (DB) Risk Allocation Tool." A Java Applet developed for the Georgia Department of Transportation (GDOT).

C2. Featured Articles in Newsletters

- 8) *Ashuri, B. (2018). "Perspectives, While the Use of Design-Build Continues to Grow, Design-Bid-Build Still Has Its Proponents. What Do You See for the Future of Traditional DBB?" *Integration Quarterly*, Issue 2 | 2018

- 9) *Ashuri, B. (2017). "Perspectives, What Do You Think Is the Biggest Obstacle to Achieving Full Authority in All 50 States?" *Integration Quarterly*, Issue 3 | 2017
- 10) *Ashuri, B., and Lewe, J-H. (2017). "Energy Performance Contracting (EPC) at the Georgia Tech Campus: An Economic Decision Analysis Model and a Case Study." *Georgia Tech Serve-Learn-Sustain (SLS)*
- 11) *Ashuri, B., and **Shahandashti, M.** (2013). "Forecasting Engineering News-Record Construction Cost Index Using Multivariate Time Series Models." *Ampirix Insights for Owners/Contractors September 2013*, <http://ampirix.com/forecasting-engineering-news-record-construction-cost-index-using-multivariate-time-series-models/>
- 12) *Ashuri, B. (2013). "Georgia Design-Build Guidance Boosts Legislative Limits." *Research Makes the Difference 2013 Innovation Advances Transportation*, The American Association of State Highway and Transportation Officials (AASHTO) Brochure Showcasing High Value Transportation Research.
- 13) *Ashuri, B. (2012). "AUMScore: Energy Efficiency Benchmarking." *SGA Sustainability Committee Newsletter*, 2, November/December 2012.

C3. Professional Practice

- 14) *Ashuri, B., and **Yarmohammadi, S.** (2013). "Survey of BIM Service Providers." *Ampirix*, Atlanta, GA.

C4. Refereed Posters

- 15) ***Liang, Y.**, Ashuri, B., and **Zeng, S.** (2020). "Developing a New Cash Flow Expenditure Model Considering the Flexibilities Offered by the Innovative Project Delivery Methods." *The 8th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, October 19-23, 2020.
- 16) ***Lee, J.H.**, Zhou, Y., and Ashuri, B. (2020). "Emerging Trends in Design Professional Liability Policies in Innovative Project Delivery." *The 8th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, October 19-23, 2020.
- 17) *Ashuri, B., **Chung, F.**, **Zeng, S.**, **Jallan, Y.**, and **Baek, M.** (2020). "Estimating ROW Acquisition Project Timelines for Major Projects based on Analyzing ROW Acquisition Processes: Phase I." *The 8th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, October 19-23, 2020.
- 18) ***Liang, Y.**, and Ashuri, B. "Saving Refinancing Cost under Cash Flow Shortage: The Option Value of Contingent Finance Support in Transportation Public-Private Partnership Projects." *Transportation Research Board (TRB) 99th Annual Meeting*, Washington DC, January 15, 2020.
- 19) ***Baek, M.**, Ashuri, B., **Shah, R.**, and Kingsley, G. (2019). "Best Management Practices of Design-Bid-Build Transportation Program-Project Delivery: Phase 1." *The 7th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 13, 2019.
- 20) ***Lee, J.H.**, **Zhou, Y.**, and Ashuri, B. (2019). "Emerging Trends in Design Professional Liability Policies in Innovative Project Delivery." *The 7th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 13, 2019.

- 21) ***Liang, Y.**, and Ashuri, B. "Using Analytics and Partnerships to Advance Smart Cities and Smarter Engineering and Construction Decisions." *2019 Engineering Project Organizations Conference (EPOC)*, Vail, CO, June 26, 2019.
- 22) *Thomas, V., Ashuri, B., **Broesicke, O.A.**, **Shirazi, A.**, Clark, J., Green Leigh, N., Fujimoto, R., and Crittenden, J. (2018). "Participatory Modeling of Complex Urban Infrastructure Systems: Model Urban SysTems (MUST)." *Resilience of Interdependent Infrastructure Systems: A CRISP/RIPS Grantees Workshop*, George Mason University, Arlington, VA, December 5–6, 2018.
- 23) *Baek, M., and Ashuri, B. (2018). "Local Construction Cost Models for Highway Projects in the State of Georgia." *The 6th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 6, 2018.
- 24) *Ashuri, B., **Moradi, A.**, Baek, M., Kingsley, G., An, H.Y., Zhang, L., **Liang, Y.**, and **Bahrami, S.** (2018). "Comprehensive Risk Assessment for Functional Offices during Plan Development Process (PDP)." *The 6th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 6, 2018.
- 25) ***Lee, J.H.**, **Jallan, Y.**, and Ashuri, B. (2018). "Materials Quality Management for Alternative Project Delivery." *The 6th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 6, 2018.
- 26) ***Li, M.**, and Ashuri, B. (2018). "Inequality of Food Accessibility around Atlanta." *American Planning Association's (APA's) 2018 National Planning Conference*, New Orleans, LA, April 21–24, 2018.
- 27) ***Baek, M.**, and Ashuri, B. (2018). "Modeling Spatial Heterogeneity to Establish Local Construction Models for Highway Projects." *The 54th Associated Schools of Construction (ASC) Annual International Conference Proceedings*, Minneapolis, Minnesota, April 18–21 2018 (Recipient of the 2018 ASC Best Poster Award).
- 28) ***Shirazi, A.**, and Ashuri, B. (2018). "Life Cycle Energy Analysis (LCEA) of Single Family Residential Buildings over Decades: Atlanta Case Study." *2018 Construction Research Congress*, ASCE, New Orleans, LA, April 2–4, 2018.
- 29) ***Baek, M.**, and Ashuri, B. (2018). "Analysis of Variability in Highway Construction Cost." *2018 Construction Research Congress*, ASCE, New Orleans, LA, April 2–4, 2018.
- 30) *Shannon, L., Durham, S., and Ashuri, B. (2017). "Development of Implementation Plan for GDOT e-Construction Program." *The 5th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, October 5, 2017.
- 31) ***Lee, J.H.**, **Jallan, Y.**, and Ashuri, B. (2017). "Synthesis of Quality Assurance Practices of State DOTs for Highway Construction Projects Using Alternative Delivery." *The 5th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, October 5, 2017.
- 32) ***Baek, M.**, and Ashuri, B. (2017). "The Effect of Volatile Market Conditions on Highway Construction Costs." *The 5th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, October 5, 2017.
- 33) ***Bahrami, S.**, and Ashuri, B. (2017). "State DOTs' Challenges for Design–Build Professional Staffing and Recommended Strategies to Address the Challenges." *The 5th Annual*

- Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, October 5, 2017.*
- 34) ***Moradi, A.**, Ashuri, B., **Baek, M.**, Kingsley, G., Zhang, L., and An, Y. (2017). "Risk Identification and Mitigation Strategies to Enhance the Delivery of Highway Projects." *The 5th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, October 5, 2017.*
 - 35) ***Shirazi, A.**, and Ashuri, K. (2017). "Life Cycle Energy Analysis of Single Family Residential Buildings Over Decades: Atlanta Case Study." *The 53rd Associated Schools of Construction (ASC) Conference, Seattle, WA, April 5–8, 2017 (Recipient of the 2017 ASC Best Poster Award).*
 - 36) ***Baek, M.**, and Ashuri, K. (2017). "Multiple Linear Regression for Variation in the Submitted Unit Price Bids for Bid Line Items." *The 53rd Associated Schools of Construction (ASC) Conference, Seattle, WA, April 5–8, 2017.*
 - 37) ***Cao, Y.**, and Ashuri, B. (2016). "Data Driven Projects Analytics for Labor Productivity Analysis of Subcontractors." *AGC/AIA BIMForum (The US Chapter of buildingSMART International) Conference, Atlanta, GA, October 18, 2016.*
 - 38) ***Toroghi, S.H.**, and Ashuri, B. (2016). "Solar Energy for a Smart City: An Investigation of the Possible Impact of the Socioeconomic and Geospatial Factors on the Adoption of Photovoltaic Systems in the Atlanta Metropolitan Area." *2nd International Environmental Youth Symposium, The U.S. Environmental Protection Agency Region 4, Atlanta, GA, September 8–9, 2016.*
 - 39) ***Baek, M.**, Ashuri, B., and **Li, Y.** (2016). "Analyzing Variation of the Submitted Unit Price Bids for Highway Construction Projects by Using Construction Market and Economic Factors." *The 4th Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, September 1, 2016.*
 - 40) ***Yarmohammadi, S.**, and Ashuri, B. (2016). "Real-Time Data Analytics for Automated Monitoring of Engineering Design Projects." *Construction Industry Institute (CII) Annual Conference, National Harbor, MD, August 1–3, 2016.*
 - 41) ***Mostaan, K.**, and Ashuri, B., (2016). "Barriers and Enabling Mechanisms for Innovative Project Delivery Using Public–Private Partnerships in the United State." *Transportation Research Board 95th Annual Meeting, Washington, DC, January 10–14, 2016.*
 - 42) *Ashuri, B., and **Mostaan, K.** (2015). "State of Private Financing in Development of Highway Projects across the United States." *The 3rd Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, September 22, 2015.*
 - 43) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2015). "A Data Mining Approach for Analyzing the Effects of Price Adjustment Clauses on Bid Prices Considering Material Quantity and Projects Size." *The 3rd Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, September 22, 2015.*
 - 44) ***Baek, M.**, **Mostaan, K.**, and Ashuri, B. (2015). "Budget-based Design in Highway Project Development." *The 3rd Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, September 22, 2015.*

- 45) ***Mostaan, K.**, and Ashuri, B. (2015). "State of Private Financing in Development of Public Infrastructure Projects in the United States." *Construction Industry Institute (CII) Annual Conference*, Boston, MA, August 3–5, 2015.
- 46) *Shahandashti, S.M., and Ashuri, B. (2015). "Improving Construction Cost Escalation Forecasting Using Multivariate Time Series Models." *The 51st ASC Annual International Conference Proceedings*, College Station, TX, April 22–25.
- 47) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2015). "A Data Mining Approach for Analyzing the Effects of Price Adjustment Clauses on Bid Prices Considering Material Quantity and Projects Size." *Transportation Research Board 94th Annual Meeting*. Washington, DC, January 11–15, 2015.
- 48) *Ashuri B., **Reisi, M.**, **Ilbeigi, M.**, **Sung, E.**, Rogers, J., and Kingsley, G. (2014). "Streaming Project Delivery through Risk Analysis." *The 2nd Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 23, 2014.
- 49) *Ashuri, B., and **Mostaan, K.** (2014). "Design–Build–Finance: Assessment of Opportunities and Challenges." *2014 Transportation Research Poster Session*, The Georgia Department of Transportation and the Georgia Transportation Institute, Atlanta, GA, September 23, 2014.
- 50) ***Ilbeigi, M.**, and Ashuri, B. (2014). "Clustering Analysis for Identification of the Effect of Price Adjustment Clauses on Submitted Bid Prices." *The 2nd Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 23, 2014.
- 51) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2014). "Empirical Analysis of the Effects of Material Price Adjustment Clauses on Submitted Bid Prices." *Construction Industry Institute (CII), Academic Poster Session*, Indianapolis, IN, July 21–23, 2014.
- 52) ***Mostaan, K.**, and Ashuri, B. (2014). "State of Private Financing in Development of Highway Projects in the United States." *Transportation Research Board 5th International Conference on Surface Transportation Financing: Innovation, Experimentation, and Exploration*, Irvine, CA, July 9–11, 2014.
- 53) ***Shahandashti, S.M.**, and Ashuri, B. (2014). "Improving Construction Cost Escalation Estimation Using Macroeconomic, Energy and Construction Market Variables." *ASCE Construction Research Congress*, May 19–21, Atlanta, GA (This paper received the **Second Place Poster Award** in the ASCE Construction Research Congress).
- 54) ***Shahandashti, S.M.**, Ashuri, B., and Tavakolan, M. (2014). "Determining Value of Transportation Research: Methods, Measures, and Data Sources." *The 2014 University Transportation Center (UTC) Conference for the Southeastern Region*, Atlanta, GA, March 24–25.
- 55) ***Shahandashti, S.M.**, and Ashuri, B. (2014). "Improving Cost Forecasting Using Vector Error Correction Models." *Georgia Tech Research & Innovation Conference*, Atlanta, GA.
- 56) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2014). "Analysis of the Effect of Offering Price Adjustment Clauses on Highway Construction Bid Prices in Georgia." *The Southeastern Transportation Research, Innovation, Development and Education Center (STRIDE) Student Poster Competition at the 93rd Annual Meeting of the Transportation Research Board (TRB)*, Washington, DC, January 2014 (This poster received the **Second Place Poster Award** in the STRIDE Student Poster Competition).
- 57) *Ashuri, B., **Kashani, H.**, and **Mostaan, K.** (2013). "Recommended Guide for Next Generation of Transportation Design–Build Procurement and Contracting in the State of Georgia." *The 1st Annual Transportation Research Expo Jointly Hosted by the Georgia*

Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI), Atlanta, GA, September 24, 2013.

- 58) ***Ilbeigi, M.**, Ashuri, B., and **Shayegh, S.** (2013). "Impact of Price Adjustment Clauses on Highway Construction Bid Prices in Georgia." *The 1st Annual Transportation Research Expo Jointly Hosted by the Georgia Department of Transportation (GDOT) and the Georgia Transportation Institute (GTI)*, Atlanta, GA, September 24, 2013.
- 59) ***Shahandashti, S.M.**, and Ashuri, B. (2013). "Enhancing Cost Escalation Estimation Using Macroeconomic, Energy and Construction Market Variables." *2013 CII Annual Conference*, Orlando, FL.
- 60) ***Shahandashti, S.M.**, Ashuri, B., **Kashani, H.**, and **Lu, J.** (2012). "Valuation of Investments in Building Energy Improvement Options Under Uncertainty." *2012 Construction Research Congress*, West Lafayette, IN, May 21–23, 2012.
- 61) ***Stephenson, R.**, and Ashuri, B. (2012). "The Effects of Green Building Certification on Housing Prices in Metropolitan Atlanta." *Georgia Tech Research and Innovation Conference*, February 7, 2012.
- 62) ***Kashani, H.**, **Lu, J.**, **Shahandashti, S.M.**, and Ashuri, B. (2011). "Optimal timing of investments in energy efficient buildings." *2011 CII Annual Conference*, Chicago, IL.
- 63) ***Phometsi, M.**, and Ashuri, B. (2011). "Workspace Flexibility Valuation." *Georgia Tech Research and Innovation Conference*, February 8, 2011.
- 64) *Ashuri, B., **Kashani, H.**, and **Lu, J.** (2010). "Investment Decision Making about Transportation Infrastructure Systems: A Real Options Model for Evaluating Build–Operate–Transfer (BOT) Highway Projects." *2010 CII Annual Conference*, Orlando, FL, August 3–5, 2010.
- 65) *Ashuri, B., and **Kashani, H.** (2009). "Flexible Methods for the Development and Preservation of Transportation Infrastructure Systems: A Real Option Approach for Infrastructure Investment Decision Making." *The Conference on Developing a Research Agenda for Transportation Infrastructure Preservation and Renewal*, Washington, DC, November 12–13, 2009.
- 66) *Ashuri, B., **Lu, J.**, and Chiara, N. (2009). "Time Series Forecasting of ENR Construction Cost Index." *2009 CII Annual Conference*, Reno, NV, July 28–30, 2009.

C5. Non-refereed Posters

- 67) ***Lee, J.H.**, **Jallan, Y.**, and Ashuri, B. (2018). "Materials Quality Management for Design–Build and Innovative Project Delivery Systems." *Civil Engineering Poster Expo*, Mason Building, Atlanta, GA, September 21, 2018.
- 68) ***Toroghi, S.H.**, **Li, M.**, and Ashuri, B. (2016). "Automated Piezoelectric (PE) Potential Assessment: PE Calculator®." *ERC 15-589 Pre-Award Site Visit, Engineering Research Center for Gigatechnology*, Georgia Institute of Technology, Atlanta, GA, November 7, 2016.
- 69) ***Shirazi, A.**, and Ashuri, B. (2016). "Life Cycle Energy Analysis of Single Family Residential Buildings over Decades: Atlanta Case Study." *ERC 15-589 Pre-Award Site Visit, Engineering Research Center for Gigatechnology*, Georgia Institute of Technology, Atlanta, GA, November 7, 2016.
- 70) *Ashuri, B., and **Bell, J.** (2016). "Sustainable Development of Construction Megaprojects through Community Engagement." *Center for Serve-Learn-Sustain (C-SLS) Public Service Pathway Projects Spring Showcase*, April 8, 2016.
- 71) ***Ilbeigi, M.**, and Ashuri, B. (2015). "Empirical Analysis of the Effects of Material Price Adjustment Clauses on Submitted Bid Prices." *Poster session with the U.S. Deputy Secretary*

- of Transportation, Mr. Victor Mendez, School of Civil & Environmental Engineering, Georgia Institute of Technology, July 27, 2015.*
- 72) ***Mostaan, K.**, and Ashuri, B. (2015). "State of Private Financing in Development of Public Infrastructure Projects in the United States." *Poster session with the U.S. Deputy Secretary of Transportation, Mr. Victor Mendez, School of Civil & Environmental Engineering, Georgia Institute of Technology, July 27, 2015.*
- 73) ***Hite, J.**, and Ashuri, B. (2011). "Assessing Building Efficiency and Introducing Concepts to High School Students." *2011 End of Summer Celebration Luncheon, CEISMC – Center for Education, Integrating Science Math and Computing, Georgia Institute of Technology, July 22, 2011.*

D. Presentations

D1. Keynote/Plenary Talks

- 1) *Ashuri, B. (2019). "Project Finance and Public–Private Partnership (P3) for Transportation Infrastructure Mega Projects in the United States: A Critical Assessment of Barriers and Enabling Mechanisms." *The 7th IPMA (International Project Management Association) Research Conference and the 14th International OTMC (Organization, Technology and Management in Construction) Conference, Zagreb, Croatia, September 4–7, 2019.*
- 2) *Ashuri, B. (2019). "Construction Analytics: Data-Driven, Risk-Based Decision-Making for Project Management." *Puget Sound Chapter Project Management Institute (PSPMI), Seattle, WA, April 25, 2019.*
- 3) *Ashuri, B. (2018). "Big Data Educational Opportunities for Design and Construction Analytics." *2018 Chinese University Internalization Conference on Big Data, Artificial Intelligence and Internet of Things, Xuzhou, Jiangsu, China, October 12, 2018.*
- 4) *Ashuri, B. (2018). "Building Information Modeling (BIM) and Big Data Analytics." *2018 Chinese University Internalization Conference on Big Data, Artificial Intelligence and Internet of Things, Xuzhou, Jiangsu, China, October 12, 2018.*
- 5) *Ashuri, B. (2018). "BIM and Data Analytics: BIM Log Mining for Building Design Productivity Measurement and Analysis." *International Congress Lean BIM Bolivia, Santa Cruz, Bolivia, August 17, 2018.*
- 6) *Ashuri, B. (2018). "BIM Log Mining for Design Productivity Analysis and Collaboration Assessment." *Symposium of Innovation in Integrated Project Management, University of Bio-Bio, Concepción, Chile, March 27, 2018.*

D2. Invited Conference/Workshop Presentations

- 7) *Lam, D., Ashuri, B., and Hojjatie, B. (2020). "Smart Cities Grant for Connecting Traffic Signals in Valdosta." *Georgia Transit Association Annual Conference, November 18, 2020.*
- 8) *Ashuri, B. (2020). "What Does an Industrial Engineer Do?" *Inauguration of the New B.S. Degree in Engineering Management Technology at Valdosta State University (VSU), October 21, 2020.*
- 9) ***Liang, Y.**, and Ashuri, B. (2019). "The Use of Public–Private Partnerships to Facilitate the Development of Electric Vehicle Charging Infrastructures in the United States." *Inaugural Georgia Tech Sustainability Showcase, Atlanta, GA, October 28, 2019.*
- 10) *Ashuri, B. (2019). "Index-based Transportation Cost Forecasting." *Transportation Estimators Association (TEA) Conference, Overland Park, KS, September 27, 2019*
- 11) *Ashuri, B., Aflatoony, L., Bartlett, C.M., and Rakha, T. (2019). "Decision Analytics in Design and Construction." *College of Design Research Forum, Georgia Institute of Technology,*

- Atlanta, GA, September 26, 2019 (The forum was led, organized, and moderated by Dr. Ashuri).
- 12) ***Jallan, Y.**, and Ashuri, B. (2019). "Construction Analytics: Text Mining Applied to Construction Litigation and Risk Management." *Digital Building Laboratory (DBL) Industry Days 2019*, Atlanta, GA, May 9, 2019.
 - 13) *Ashuri, B. (2019). "Design–Build Essentials: A Deeper Dive." *2019 Design-Build for Transportation/Aviation Conference*, Cincinnati, OH, April 8, 2019.
 - 14) ***Liang, Y.**, and Ashuri, B. (2018). "Option Value of Risk-Sharing Mechanisms in Highway Public–Private Partnership Projects: from the Perspective of Refinancing." *2018 Associated Schools of Construction (ASC)*, Southeast Region, Peachtree City, GA, October 25, 2018.
 - 15) ***Baek, M.**, and Ashuri, B. (2018). "Analysis of Construction Cost Variation Using the Random-Parameters Regression." *2018 Associated Schools of Construction (ASC)*, Southeast Region, Peachtree City, GA, October 24, 2018.
 - 16) *Ashuri, B. (2018). "BIM Log Mining and Data Analytics for Productivity Analysis and Collaboration Assessment." *The 2018 BIMForum, The US Chapter of buildingSMART International*, Las Vegas, NV, September 26, 2018.
 - 17) *Ashuri, B. (2018). "Economics of Built Environment Resilience." *The Hurricane Disaster Infrastructure Resilience and Planning Workshop II, AIChE (American Institute of Chemical Engineers)*, Madison, WI, July 25, 2018.
 - 18) *Ashuri, B. (2018). "Public–Private Partnership (P3) for Smart Communities." *Georgia Smart Communities Challenge Workshop*, April 9, 2018.
 - 19) *Ashuri, B. (2018). "Variability in Current Practices among State DOTs: Survey of State DOT Officials." *5th Annual Public-Private Partnership (P3) Town-Gown Roundtable*, hosted by The Association for the Improvement of American Infrastructure (AIAI), American Road & Transportation Builders Association (ARTBA) and Public Works Financing, Washington, DC, January 9, 2018.
 - 20) ***Baek, M.**, and Ashuri, K. (2018). "Profile Monitoring for Examining Impact of Hurricane Katrina and Rita on Highway Construction Cost." *Transportation Research Board (TRB) 97th Annual Meeting*, Washington, DC, January 7–11, 2018.
 - 21) ***Lee, J.H.**, **Jallan, Y.**, and Ashuri, B. (2017). "Quality Acceptance Approaches Used by State DOTs in Design–Build Highway Projects." *5th Annual UTC Conference for the Southeastern Region*, J. Wayne Reitz Union, University of Florida, Gainesville, FL, November 16–17, 2017.
 - 22) *Ashuri, B., and Dzioba, B. (2017). "Design–Build Done Right: Best Practices and Results." *Construction Users Roundtable (CURT) Offsite Construction Workshop*, Renaissance Concourse Atlanta Airport Hotel, Atlanta, GA, November 15, 2017.
 - 23) ***Baek, M.**, and Ashuri, B. (2017) "Cumulative Sum Control Chart Analysis for Detecting Shifts in Construction Costs after Large-Scale Disasters." *2017 Associated Schools of Construction, Southeast Region*, Peachtree City, GA, October 25, 2017.
 - 24) ***Ashuri, B.**, and Cao, Y. (2017). "Project Analytics for Labor Productivity Analysis." *Georgia Tech Digital Building Lab—2017 Symposium on the Future of Practice*, Atlanta, GA, October 5, 2017.
 - 25) *Ashuri, B., Cho, Y., **Cao, Y.**, and **Yang, X.** (2017). "Integrating Sensing Technologies into Project Control to Enhance Productivity Assessment." *2017 Digital Building Laboratory (DBL) Members Meeting*, Atlanta, GA, May 8, 2017.
 - 26) ***Baek, M.**, and Ashuri, K. (2016). "Analysis of the Price Volatility in Highway Construction Bid." *Associated Schools of Construction (ASC) Conference for Region 2*, Peachtree City, GA, November 2, 2016.

- 27) ***Shirazi, A.**, and Ashuri, K. (2016). "Life Cycle Energy Analysis of Single Family Residential Buildings over Decades: Atlanta Case Study." *Associated Schools of Construction (ASC) Conference for Region 2*, Peachtree City, GA, November 2, 2016.
- 28) *Ashuri, B. (2016). "Innovative Project Delivery Systems and Alternative Contracting Methods for Toll Road Projects." *Georgia Regional Transportation Authority (GRTA)*, Atlanta, GA, October 25, 2016.
- 29) ***Cao, Y.**, and Ashuri, B. (2016). "Project Analytics for Labor Productivity Analysis of Subcontractors." *2016 Digital Building Laboratory (DBL) Symposium*, Atlanta, GA, May 17, 2016.
- 30) ***Yarmohammadi, S.**, and Ashuri, B. (2016). "Extract Productivity Information from BIM Design Log Files through Sequential Pattern Mining." *2016 Digital Building Laboratory (DBL) Symposium*, Atlanta, GA, May 16, 2016.
- 31) *VanMeter, D., Ashuri, B., **Mostaan, K.**, and Mote, W. (2016). "Georgia DOT Application of R10 Strategies for Managing Complex Projects." *SHRP2 (Strategic Highway Research Program) R10 Peer Exchange Conference*, Des Moines, IA., Washington, DC, May 3–4, 2016.
- 32) *Ashuri, B., **Mostaan, K.**, and **Hannon, D.** (2016). "Environmental Analysis & Permitting Best Practices in Transportation Design–Build Projects." *2016 DBIA Design-Build in Transportation*, Charlotte, NC, April 19, 2016.
- 33) *VanMeter, D., Ashuri, B., and **Mostaan, K.** (2016). "Alternative Delivery Principles with a Multimodal Perspective." *Transportation Research Board 95th Annual Meeting*, Washington, DC, January 10–14, 2016.
- 34) ***Yarmohammadi, S.**, and Ashuri, B. (2015). "Data Mining Metrics in Design & Data Visualization for Design Team Performance Measurement." *2015 Digital Building Laboratory (DBL) Members Meeting*, Atlanta, GA, August 5, 2015.
- 35) *Wang, J., **Yarmohammadi, S.**, and **Ashuri, B.** (2015). "Predictive Project Analytics: Labor Productivity Analysis Using Pattern Recognition Techniques." *2015 Digital Building Laboratory (DBL) Members Meeting*, Atlanta, GA, August 4, 2015.
- 36) *Ashuri, B., **Yarmohammadi, S.**, and **Wang, J.** (2015). "Labor Productivity Analysis Using Pattern Recognition Techniques." *2015 Digital Building Laboratory (DBL) Symposium*, Atlanta, GA, May 11, 2015.
- 37) *Ashuri, B., and **Yarmohammadi, S.** (2015). "Data Visualization in Design/Construction Performance Measurement." *2015 Digital Building Laboratory (DBL) Symposium*, Atlanta, GA, May 11, 2015.
- 38) *Ashuri, B., and **Hoening, A.** (2015). "Best Practices—Environmental; Design–Build Done Right for the Transportation Sector." *2015 Design-Build in Transportation Conference*, San Antonio, TX, March 10, 2015.
- 39) *Ashuri, B., and **YarMohammadi, S.** (2015). "LIVE-C[®]: Lighting Investment Valuation for Electrical Contractors – A VBA/Excel Tool for Cost Estimation and Financial Analysis of Investments in Lighting Upgrade Projects." *Electri Council January Meeting*, Rancho Bernardo Inn, San Diego, CA, January 23, 2015.
- 40) *Ashuri, B. (2014). "Industry Research Collaboration Opportunities." A Conversation Between Practice and Academia Focused on Industry/University Collaboration in Research, *The first annual "AEC Academic/Industry Partnership Symposium" hosted by the Georgia Tech College of Architecture's Construction Resource Center*, The Historic Academy of Medicine Building, Atlanta, GA, October 23, 2014.
- 41) ***Shahandashti, S.M.**, **Mostaan, K.**, and Ashuri, B. (2014). "Empirical Analysis of Variations in Photovoltaic Energy Production." *North America–East Asia Workshop on Big Data Analytics for Infrastructure and Building Sustainability and Resilience Research (IBSR)*,

sponsored by the National Science Foundation, Arizona State University, and Tsinghua University, Beijing, China, September 19, 2014 (Travel expenses were paid through a grant from the National Science Foundation [NSF]).

- 42) ***Wang, J.**, and Ashuri, B. (2014). "Text Mining of BIM Model Log Files to Extract Useful Information for Enhancing Design Process." *2014 Digital Building Laboratory (DBL) Members Meeting*, Georgia Institute of Technology, Atlanta, GA, August 5, 2014.
- 43) ***Yarmohammadi, S.**, and Ashuri, B. (2014). "Big Data Analytics for Quantifying Benefits of BIM." *2014 Digital Building Laboratory (DBL) Members Meeting*, Georgia Institute of Technology, Atlanta, GA, August 4, 2014.
- 44) *Ashuri, B., Ikasalo, R., Dyer, J., Huang, V., and Holtzclaw, R. (2014). "Managing a Portfolio of Projects – A Playbook for Success." Research Team 303 Implementation Session (Panel Moderator: Gary Lanier), *2014 Construction Industry Institute (CII) Annual Conference*, Indianapolis, IN, July 21–23, 2014,
- 45) ***Yarmohammadi, S.**, and Ashuri, B. (2014). "Big Data Analytics for Quantifying Benefits of BIM." *2014 Digital Building Laboratory (DBL) Symposium*, Georgia Institute of Technology, Atlanta, GA, May 23, 2014.
- 46) ***Yarmohammadi, S.**, and Ashuri, B. (2014). "Forming a DBL Community of Practice (COP) to Research Productivity Analysis for MEP Coordination." *2014 Digital Building Laboratory (DBL) Symposium*, Georgia Institute of Technology, Atlanta, GA, May 22, 2014.
- 47) *VanMeter, D., and Ashuri, B. (2014). "Assessing When Design–Build Contracting Is Most Effective: Expediting Project Delivery and Reducing Costs." *TRB 93rd Annual Meeting, Innovations You Can Deploy Now: High-Value Research Results*, Washington, DC, January 13, 2014.
- 48) ***Yarmohammadi, S.**, and Ashuri, B. (2013). "DBL Community of Practice for Productivity Analysis of Mechanical, Electrical, and Plumbing (MEP) Coordination." *2013 Digital Building Laboratory (DBL) Members Meeting*, Georgia Institute of Technology, Atlanta, GA, August 6, 2013.
- 49) *Ashuri, B., and **Shahandashti, Y.** (2013). "Best Practice for Determining Research Results." *2013 AASHTO Research Advisory Committee and TRB State Representative Annual Meeting, Value of Research Taskforce*, Baton Rouge, LA, July 15, 2013.
- 50) *Jared, D., and Ashuri, B. (2013). "Recommended Guide for Next Generation of Trans Design–Build Procurement & Contracting in the State of Georgia." *2013 AASHTO Research Advisory Committee and TRB State Representative Annual Meeting, Value of Research Taskforce*, Transportation Research 2013 and Beyond: Collaboration, Management & Deployment, Baton Rouge, LA, July 14–18, 2013.
- 51) ***Mostaan, K.**, and Ashuri, K. (2013). "Challenges and Opportunities for Expediting Delivery of Design–Build Projects". *University Transportation Center (UTC) Conference for the Southeastern Region, Orlando, FL*, April 4–5, 2013.
- 52) *Ashuri, B. (2013). "Assessment of Current Practices for Determining Value of Research." *2013 Annual Meeting of the Southeast Transportation Consortium (STC)*, Baton Rouge, LA, March 5, 2013.
- 53) *VanMeter, D., and Ashuri, B. (2013). "Evaluation of the Appropriateness of Design–Build Project Delivery System for a Transportation Project: The Georgia Approach." *TRB 92nd Annual Meeting, Project Delivery Methods Committee (AFH15) Meeting*, Washington, DC, January 15, 2013.
- 54) ***Shahandashti, M.**, and Ashuri, B. (2012). "Introduction to Investments in Photovoltaic Systems." *2012 Siemens Competition—High School Workshop*, Georgia Tech, November 16, 2012.

- 55) *Ashuri, B. (2011). "Sustainability: Metrics and Tools for Sustainable Capital Facilities." *2011 Digital Building Laboratory (DBL) Symposium*, Georgia Institute of Technology, Atlanta, GA, May 25, 2011.
- 56) *Ashuri, B. (2011). "An Investment Analysis Framework for Adopting Innovative Energy Retrofit Technologies in Existing Commercial and Industrial Buildings." *Researching through the Roadmap: Planning & Design, FIATECH 2011 Technology Conference & Showcase*, Phoenix, AZ, April 18–20, 2011.
- 57) *Ashuri, B., and **Shahandashti, S.M.** (2011). "Uncertainty Analysis Games for Teaching Construction Risk Management." *Celebration of Teaching Day at Georgia Tech*, March 17, 2011.
- 58) *Ashuri, B. (2010). "An Analytic Framework for Lifecycle Facility Costs Analysis." *2010 Digital Building Laboratory (DBL) Members Meeting*, Georgia Institute of Technology, Atlanta, GA, October 29, 2010.
- 59) *Ashuri, B. (2009). "Issues Related to Funding Research in Construction." *International Conference on Construction Research Funding in the XXI Century: A Partnership between Academia, Industry, and the Public Sector*, Sponsored by the National Science Foundation, University of Illinois, Urbana–Champaign, Urbana, IL, July 8–10, 2009 (Travel expenses were paid through a grant from the National Science Foundation [NSF]).
- 60) *Ashuri, B. (2010). "Pricing Methods for Retrofit Decision-making." *2010 Digital Building Laboratory, (DBL) Symposium*, Manufacturing Research Center Auditorium, Georgia Institute of Technology, Atlanta, GA, June 15, 2010.
- 61) Ashuri, B. (2007). "Investment analysis in competitive, dynamic retail markets." *INFORMS annual meeting*, Seattle, WA, November 2–3, 2007.
- 62) Ashuri, B., Iyengar, V., Nigam, A., and Vergo, J. (2007). "Aggregation of expert assessments during IT project portfolio management." *Georgia Tech Graduate Technical Symposium*, Atlanta, GA, March 15–16, 2007.

D3. Invited Seminars and Lectures

- 63) *Ashuri, B. (2020). "Construction and Infrastructure Economics." *Sonny Astani Department of Civil and Environmental Engineering, University of Southern California (USC)*, April 20, 2020.
- 64) *Ashuri, B. (2019). "Construction Cost Analytics." *School of Building Construction Advisory Board Meeting*, Atlanta, GA, October 11, 2019.
- 65) *Ashuri, B. (2019). "Valuation of Green Technology Investments under Uncertainties." *Christian Doppler Laboratory for Anthropogenic Resources, TU Wien*, Vienna, Austria, July 5, 2019.
- 66) *Ashuri, B. (2019). "Big Data and BIM: Text Mining of BIM Log Data for Productivity Analysis." *Wuyi University*, Jiangmen, Guangdong, China, May 24, 2019.
- 67) *Ashuri, B. (2019). "BIM Log Mining: A Data Mining Approach to Identify Design Productivity and Collaboration." *North China University of Water Resources and Electric Power*, Zhengzhou, Henan, China, May 23, 2019.
- 68) *Ashuri, B. (2019). "Big Data Analytics for Productivity Assessment of BIM Design Projects." *College of Civil and Construction Engineering, Henan University*, Kaifeng, Henan, China, May 22, 2019.
- 69) *Ashuri, B. (2019). "Construction Analytics: BIM Log Mining for Design Productivity Analysis." *School of Management Science and Engineering, Zhengzhou University*, Zhengzhou, Henan, China, May 20, 2019.

- 70) *Ashuri, B. (2019). "Highway Infrastructure Public–Private Partnership (P3) in the U.S.: A Survey of Barriers and Enablers." *North China University of Water Resources and Electric Power*, Zhengzhou, Henan, China, May 16, 2019.
- 71) *Ashuri, B. (2018). "BIM Log Mining: A Data-Driven Approach for Design Productivity and Collaboration Analysis." *Heriot-Watt University | School of Energy, Geoscience, Infrastructure and Society | Institute for Sustainable Building Design*, Edinburgh, Scotland, June 8, 2018.
- 72) *Ashuri, B. (2018). "Highway Infrastructure Project Finance in the U.S.: A Survey of Barriers and Enablers." *The Bartlett School of Construction & Project Management, UCL Faculty of the Built Environment, University College London (UCL)*, London, UK, May 30, 2018.
- 73) *Ashuri, B. (2018). "Application of Data Science and Social Network Analysis in Design Productivity Assessment." *The Center for Systems Engineering and Innovation (CSEI), Imperial College London (ICL)*, London, UK, May 29, 2018.
- 74) *Ashuri, B. (2018). "Public–Private Partnership (P3) for Broadband Deployment." *Invited Presentation to the Smart Cities Board of the Southern Company*, Atlanta, GA, May 17, 2018.
- 75) *Ashuri, B. (2018). "Project Data Analytics." *Bechtel Innovation, Bechtel Corporation*, Reston, VA, February 2, 2018.
- 76) *Ashuri, B. (2017). "Mining of BIM Log Files: Design Process and Productivity Analysis." *Department of Civil & Environmental Engineering, University of Alberta*, Edmonton, AB, Canada, December 15, 2017 (All expenses for this trip were covered by the CEE Department at the University of Alberta).
- 77) *Ashuri, B. (2017). "Mining of Design Log Data: Linking Building Design Process and Design Productivity." *Construction Engineering & Management (CEM) Program, Purdue University*, West Lafayette, IN, December 1, 2017 (All expenses for this trip were covered by the CEM Program at Purdue University).
- 78) *Ashuri, B. (2017). "Overview of Research Capabilities & Interests for Collaboration: High-Performance Project Delivery System, Innovative Contracting Methods and Project Data Analytics." *Chick-fil-A Design and Construction Group*, Atlanta, GA, May 23, 2017.
- 79) *Ashuri, B. (2016). "Overview of Interdisciplinary Research in the Construction Research Center with Emphasis on Data Analytics." *Georgia Southern Construction Management Department Visit to Georgia Tech*, May 13, 2016.
- 80) *Ashuri, B. (2015). "Sustainability & Energy Management in the Multifamily Industry." *AncillaryAnalytics*, Atlanta, GA, November 11, 2015.
- 81) *Ashuri, B., and **Yarmohammadi, S.** (2015). "Data Mining & Predictive Analytics for Project Management." *Pointivo*, Atlanta, GA, August 31, 2015.
- 82) *Ashuri, B., and **Yarmohammadi, S.** (2015). "Text Mining for Design Productivity Improvement." *VIMtrek – SmartBIM*, Norcross, GA, August 21, 2015.
- 83) *Ashuri, B. (2015). "Overview of Research in Construction Research Center & Economics of the Sustainable Built Environment (ESBE) Lab." *Presentation to the Tongji University and the Shanghai Research Institute of Building Sciences (SRIBS) visiting team*, Atlanta, GA, August 18, 2015.
- 84) *Ashuri, B. (2015). "Risk Analysis Tool for Transportation Owners." *Presentation to the President and Software Development Team of Kahua*, Alpharetta, GA, July 21, 2015.
- 85) *Ashuri, B. (2015). "Predictive Project Analytics." *Presentation to the President and Software Development Team of Kahua*, Alpharetta, GA, July 9, 2015.
- 86) *Ashuri, B. (2015). "Renewable Energy Potential for Corporate Real Estate." *Presentation to the Senior Director of Business Development, University & External Relations, CoreNet Global*, Atlanta, GA, June 29, 2015.

- 87) *Ashuri, B. (2015). "Innovative Funding Mechanisms and Alternative Financing Methods for the U.S. Infrastructure." *Presentation to the Campaign Director, Infrastructure Vision 2050, Association of Equipment Manufacturers (AEM)*, Washington, DC, May 22, 2015.
- 88) *Ashuri, B. (2015). "Peer-to-peer Energy Benchmarking for the Multifamily Industry." *JDM Associates*, April 6, 2015.
- 89) *Ashuri, B., and **Yarmohammadi, S.** (2015). "Investment Valuation of Lighting Upgrade Projects Using LIVE-C[®] Tool." *Acuity Brands, Inc.*, Conyers, GA, March 31, 2015.
- 90) *Ashuri, B., and **Yarmohammadi, S.** (2015). "Cost Estimation & Valuation of Lighting Upgrade Projects Using LIVE-C[®] Tool." *Lutron Electronic, Inc.*, February 23, 2015.
- 91) *Ashuri, B. (2014). "Risk-based Economic Decision Analysis for Sustainable Civil Engineering Infrastructure." *The Charles E. Via, Jr. Department of Civil & Environmental Engineering, Virginia Tech*, Blacksburg, VA, December 17, 2014 (All expenses for this trip were covered by the CEE Department at VT).
- 92) *Ashuri, B. (2014). "Overview of the Research Program in the Economics of the Sustainable Built Environment (ESBE) Lab." *Presented to Prof. Dayana Bastos Costa – Federal University of Bahia–Brazil*, School of Building Construction, Georgia Institute of Technology, Atlanta, GA, September 29, 2014.
- 93) *Ashuri, B. (2014). "Best Practices for Infrastructure Project Prioritization." *Presentation to the Atlanta Committee for Progress (ACP) Infrastructure Taskforce*, Atlanta, GA, September 8, 2014.
- 94) *Ashuri, B. (2014). "Investment Valuation of Public–Private Partnership Transportation Infrastructure Projects." *University of Napoli Federico II*, Naples, Italy, June 13, 2014.
- 95) *Ashuri, B. (2014). "Investment in Renewable Energy for Buildings." *Department of Structural and Geotechnical Engineering, Faculty of Civil and Industrial Engineering, Sapienza University of Rome*, Rome, Italy, June 12, 2014.
- 96) ***Ilbeigi, M.**, and Ashuri, B. (2014). "Asphalt Pricing Index." *Georgia Department of Transportation (GDOT)*, Atlanta, GA, April 23, 2014.
- 97) *Ashuri, B. (2014). "Investment Valuation of Renewable Energy Systems for Buildings." *Courtesy Appointment Presentation, School of Civil & Environmental Engineering, Georgia Institute of Technology*, Atlanta, GA, April 8, 2014.
- 98) *Ashuri, B. (2013). "Productivity Analysis of Mechanical, Electrical, and Plumbing (MEP) Coordination." *2013 Digital Building Laboratory (DBL) Symposium*, Georgia Institute of Technology, Atlanta, GA, May 6, 2013.
- 99) *Ashuri, B. (2013). "Overview of Economics of the Built Environment (ESBE) Research Lab." *School of Building Construction Ph.D. Seminar*, Georgia Institute of Technology, March 12, 2013.
- 100) *Ashuri, B. (2013). "Assessment of BIM Projects." *Visit by JE Dunn Construction to the Digital Building Laboratory*, Hinman Conference Room, January 30, 2013.
- 101) *Ashuri, B. (2011). "Timing of Investments in Solar Energy for Existing Buildings." *Building Technology Seminar*, College of Architecture, Georgia Institute of Technology, December 16, 2011.
- 102) *Ashuri, B. (2011). "Pricing Flexibility in Solar Ready Homes." *College of Architecture Research Forum*, Architecture Library, Georgia Institute of Technology, November 17, 2011.
- 103) *VanMeter, D. and Ashuri, B. (2011). "Georgia Department of Transportation's Design Build Program." *State DOT Design-Build Users Group Quarterly Meeting*, September 30, 2011.
- 104) Ashuri, B. (2011). "Investment Valuation Framework for Energy-Efficient, Sustainable Buildings." *Advanced Infrastructure Systems*, Department of Civil and Environmental

Engineering, *Carnegie Mellon University*, Pittsburg, PA, February 4, 2011 (All expenses for this trip were covered by the CEE Department at CMU).

- 105) *Ashuri, B. (2010). "Real Options Applications in the Built Environment Research." *The First Year Doctoral Seminar*, College of Architecture, Georgia Institute of Technology, Atlanta, GA, March 31, 2010.
- 106) *Ashuri, B. (2009). "Healthcare Decision-Making Under Uncertainty." *Healthcare Design & Planning Research*, Health Systems Institute, Georgia Institute of Technology, October 22, 2009.
- 107) *Ashuri, B. (2009). "A Real Option Approach to Evaluate Flexibilities in Healthcare Development/Design." *Charles Pankow Foundation*, Claremont, CA, June 4, 2009.
- 108) *Ashuri, B. (2009). "A Real Option Approach to Evaluate Flexibilities On/In Building Systems." Engineering & Project Management Program, *University of California at Berkeley*, Berkeley, CA, June 3, 2009.
- 109) *Ashuri, B. (2009). "Valuation of Flexible Options On/In Built Environment Systems." *Center for Integrated Facility Engineering (CIFE) – Collaboratory for Research on Global Projects (CRGP) Seminar*, Stanford University, Stanford, CA, June 1, 2009.
- 110) *Ashuri, B. (2009). "Valuation of Flexibilities On/In Building Systems." Construction Engineering & Management Program, *University of Colorado at Boulder*, Boulder, CO, May 21, 2009.
- 111) *Ashuri, B. (2009). "Time Series Analysis Applications in Construction Research." Construction Management Program, *Colorado State University*, Fort Collins, CO, May 20, 2009.
- 112) *Ashuri, B. (2009). "New Generation Financial Modeling: Decision Making about Healthcare Design & Planning under Uncertainty." *Noblis/Georgia Tech Healthcare Meeting*, Health Systems Institute, February 23, 2009.
- 113) *Ashuri, B. (2009). "Flexibility Management for Handling Project Risks." Department of Decision Science, School of Business, *George Washington University*, Washington, DC, January 15, 2009.
- 114) *Ashuri, B. (2009). "Flexibility Management for Handling Construction Project Risks." Project Management Program, *University of Maryland*, College Park, MD, January 14, 2009.
- 115) *Ashuri, B. (2008). "An Overview of Construction Management Profession." *The Common First Year*, College of Architecture, Georgia Institute of Technology, Atlanta, GA, November 19, 2008.

E. Grants and Contracts (\$4,073,579 as PI and \$4,633,914 as Co-PI)

E1. As Principal Investigator

Title of Project: Research Experiences for Undergraduates (REU)

Agency/Company: National Science Foundation (NSF), Civil, Mechanical and Manufacturing Innovation (CMMI)

Total Dollar Amount: \$16,000

Role: PI

Period of Contract: 01/01/2021-08/31/2021

Title of Project: Virtual Public Involvement (VPI) Guidance for Encouraging Public Participation and Soliciting Feedback During the Transportation Planning Process

Agency/Company: Federal Highway Administration (FHWA)

Total Dollar Amount: \$120,000

Role: PI

Collaborator: Gordon Kingsley (co-PI)

Period of Contract: 01/01/2021–09/30/2022

Title of Project: RAPID/Collaborative Research: An Empirical Investigation of Risk Preferences of Transportation Construction Workforce Managers under COVID-19 Pandemic Uncertainties

Agency/Company: National Science Foundation (NSF), COVID-19 Research, and HDBE-Humans, Disasters, and the Built Environment

Total Dollar Amount: \$85,000

Role: PI

Collaborators: Mohsen Shahandashti, University of Texas Arlington (PI)

Period of Contract: 09/01/2020-08/31/2021

Candidate's Share: ~53% (\$45K)

Title of Project: E.T. H.O.M.E (Electric Trike/bike – Human-centered Options in Mobility with Electrification)

Agency/Company: Strategic Energy Institute (SEI)

Total Dollar Amount: \$120,000

Role: PI

Collaborators: Sol Haroon, Ray C. Anderson Sustainability Center (GRA), Jenny Hirsch, Serve-Learn-Sustain Center (Internal Partner), and Brian Bollinger, Friends of Refugees (External Partner)

Period of Contract: 08/15/2020-08/15/2022

Title of Project: Enhancing the Accuracy of Construction Cost Estimates for Major Lump Sum (LS) Pay Items and Generating a More-Accurate List of Pay Items throughout the Design Development Process

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$260,000

Role: PI

Collaborators: Minsoo Baek (co-PI), Kennesaw State University

Period of Contract: 07/02/2020-07/01/2022

Candidate's Share: ~85% (\$220,000)

Title of Project: A Traffic Monitoring and Communication System to Improve Safety, Connectivity, and Efficiency

Agency/Company: 2020 Georgia Smart Communities Challenge

Total Dollar Amount: \$150,000 (\$100,000 for the community and \$50,000 for the GT research)

Role: PI

Research and Educational Partner: Barry Hojjatie, Valdosta State University

Project Partners: City of Valdosta, Lowndes County, Southern Georgia Regional Commission, Temple, Inc., and Applied Information (ai), Inc.

Period of Contract: 08/15/2020-08/15/2021

Title of Project: Strategies and Resources for Strengthening the Implementation of the Construction Quality Acceptance Firm (CQAF) Model in the Innovative Project Delivery Environment

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$100,000

Role: PI

Period of Contract: 11/18/2019–09/17/2020

Title of Project: Entrusted Engineer-in-Charge: A New Critical Position in the Design–Build Team

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$170,000

Role: PI

Period of Contract: 07/30/2019–10/31/2020

Title of Project: Estimating ROW Acquisition Project Timelines based on Analyzing ROW Acquisition Processes: Phase I

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$100,000

Role: PI

Period of Contract: 05/06/2019–06/05/2020

Title of Project: Workshop on Construction Data Analytics

Agency/Company: Digital Building Laboratory (DBL)

Total Dollar Amount: \$5,000

Role: PI

Period of Contract: 04/01/2018–06/30/2018

Title of Project: Developing A New Cash Flow Expenditures Model Considering the Flexibilities Offered by the Design–Build–Finance (DBF) and Public–Private Partnership (P3) Project Delivery Methods

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$197,000

Role: PI

Period of Contract: 08/03/2018–09/02/2020

Title of Project: Best Management Practices (BMPs) of Design–Bid–Build Transportation Program–Project Delivery

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$75,000

Role: PI

Collaborator: Gordon Kingsley (co-PI)

Period of Contract: 08/03/2018–10/03/2019

Candidate's Share: ~90% (\$67,000)

Title of Project: Integrating Data Analytics Technologies into Project Control to Enhance Productivity Assessment

Agency/Company: Digital Building Laboratory (DBL)

Total Dollar Amount: \$30,000

Role: PI

Period of Contract: 09/01/2017–12/31/2018

Title of Project: Emerging Trends in Design Professional Liability Policies in Innovative Project Delivery

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$99,903

Role: PI

Period of Contract: 03/16/2018–08/16/2019

Title of Project: Risk Mitigation Strategies to Enhance the Delivery of Highway Projects

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$100,000

Role: PI

Collaborator: Gordon Kingsley (co-PI)

Period of Contract: 01/01/2017–09/08/2018

Candidate's Share: ~80% (\$80,000)

Title of Project: Project Analytics for Labor Productivity Analysis of Subcontractors

Agency/Company: Component Assembly Systems (CAS), Inc.

Total Dollar Amount: \$20,000

Role: PI

Period of Contract: 01/01/2017–12/31/2017

Title of Project: Enhancement of the Comprehensive Risk Assessment for Transportation

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$74,999

Role: PI

Collaborator: Gordon Kingsley (co-PI)

Period of Contract: 07/27/2016–09/08/2018

Candidate's Share: ~80% (\$60,000)

Title of Project: Materials Quality Management for Alternative Project Delivery

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$177,022

Role: PI

Period of Contract: 07/14/2016–05/15/2018

Title of Project: Partnership with Professional Associations to Advance Best Practices for Integrated Research and Education in Sustainable Communities

Agency/Company: College of Architecture (COA), Advancing COA's Culture of Research Symposiums

Total Dollar Amount: \$7,500

Role: PI

Collaborators: Bruce Stiftel (co-PI)

Period of Contract: 11/19/2015–07/31/2016

Candidate's Share: ~50% (\$3,750)

Title of Project: Synthesis of the Department Professional Workforce Needs for Successful Development of Innovative Delivery Projects

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$75,000

Role: PI

Period of Contract: 05/12/2016–08/15/2017

Title of Project: Predictive Project Analytics: Design Productivity Analysis Using Pattern Recognition Techniques

Agency/Company: Perkins+Will

Total Dollar Amount: \$14,000

Role: PI

Period of Contract: 08/01/2015–09/01/2016

Title of Project: Deploying SHRP2 Renewal 10 Guidebook for Project Management Strategies for Complex Projects

Agency/Company: Federal Highway Administration (FHWA)

Total Dollar Amount: \$65,000

Role: PI

Period of Contract: 07/02/2015–10/02/2016

Title of Project: Big Data Analytics for Subcontractor Productivity Assessment

Agency/Company: Digital Building Laboratory (DBL)

Total Dollar Amount: \$8,161

Role: PI

Period of Contract: 05/01/2015–09/01/2015

Title of Project: Best Practices for Budget-based Design

Agency: Georgia Department of Transportation

Total Dollar Amount: \$300,000

Role: PI

Period of Contract: 05/19/2014–03/31/2017

Title of Project: Text Mining of BIM Model Log Files to Extract Useful Information for Enhancing Design Process

Agency/Company: Perkins+Will

Total Dollar Amount: \$32,608

Role: PI

Period of Contract: 08/01/2014–09/01/2015

Title of Project: Valuation of Investments in Building Energy Improvements under Uncertainties

Agency/Company: National Science Foundation (NSF), Division of Civil, Mechanical and Manufacturing Innovation (CMMI), Civil Infrastructure Systems (CIS) Program

Role: PI

Total Dollar Amount: \$250,000

Period of Contract: 08/15/2013–07/31/2016

Title of Project: Pre-Teaching: Summer Undergraduate Research Experience (P-T SURE)

Agency/Company: The Center for Education Integrating Science, Mathematics, and Computing (CEISMC) and the Georgia Intern Fellowships for Teachers (GIFT) program

Total Dollar Amount: \$1,000

Role: PI

Period of Contract: 05/01/2013–08/31/2013

Title of Project: DBL Community of Practice for Productivity Analysis of Mechanical, Electrical, and Plumbing (MEP) Coordination

Agency/Company: Digital Building Laboratory (DBL)

Total Dollar Amount: \$34,000

Role: PI

Period of Contract: 08/01/2013–09/01/2014

Title of Project: Streamlining Project Delivery through Risk Analysis

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$499,994

Role: PI

Collaborators: Gordon Kingsley (co-PI) and Juan Rogers (co-PI)

Period of Contract: 04/25/2013–06/30/16

Candidate's Share: ~80% (\$400,000)

Title of Project: A Systematic Approach for the Assessment of Green Opportunities for Electrical Contractors

Agency/Company: ELECTRI International – The Foundation for Electrical Construction

Total Dollar Amount: \$7,000

Role: PI

Period of Contract: 09/01/2012–08/31/2013

Title of Project: Innovative Project Delivery Using Alternative Financing Mechanisms: Assessment of Benefits, Costs, and Risks

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$206,164

Role: PI

Period of Contract: 03/19/2013–12/31/2014

Title of Project: Determine the Impact and Effectiveness of BIM

Agency/Company: Turner Construction Company

Total Dollar Amount: \$32,000

Role: PI

Period of Contract: 08/01/2012–09/01/2013

Title of Project: Best Practices for Determining Value of Research Results

Agency/Company: The Southeast Transportation Consortium (STC) and the Louisiana Transportation Research Center (LTRC)

Total Dollar Amount: \$30,000

Role: PI

Period of Contract: 06/01/2012–05/31/2013

Title of Project: Pre-Teaching: Summer Undergraduate Research Experience (P-T SURE)

Agency/Company: The Center for Education Integrating Science, Mathematics, and Computing (CEISMC) and the Georgia Intern Fellowships for Teachers (GIFT) program

Total Dollar Amount: \$1,000

Role: PI

Period of Contract: 05/01/2012–08/31/2012

Title of Project: Development of Risk Management Strategies for State DOTs to Effectively Deal with Volatile Prices of Transportation Construction Materials

Agency/Company: The National Center for Transportation Systems Productivity and Management (NCTSPM), The U.S. Department of Transportation/Research & Innovative Technology Administration

Total Dollar Amount: \$169,045

Role: PI

Period of Contract: 05/01/2012–06/30/2014

Title of Project: How Can Innovative Project Delivery Systems Improve GDOT's Overall Efficiency in Transportation Project Delivery?

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$199,976

Role: PI

Period of Contract: 10/07/2011–04//06/2013

Title of Project: Pre-Teaching: Summer Undergraduate Research Experience (P-T SURE)
Agency/Company: The Center for Education Integrating Science, Mathematics, and Computing (CEISMC) and the Georgia Intern Fellowships for Teachers (GIFT) program
Total Dollar Amount: \$1,000
Role: PI
Period of Contract: 05/01/2011–08/31/2011

Title of Project: Timing of Investments in Building Solar Energy Intervention: A Real Options Framework to Evaluate Investments in Solar Energy for Buildings
Agency/Company: The Royal Institution of Chartered Surveyors (RICS), London, UK
Total Dollar Amount: \$9,549
Role: PI
Period of Contract: 8/22/2011–06/30/2012

Title of Project: Recommended Guide for Next Generation of Transportation Design Build Procurement and Contracting in the State of Georgia
Recipient of 2013 High Value Research “Sweet Sixteen” Award by the Value of Research Task Force, the American Association of State Highway and Transportation Officials (AASHTO)
Agency/Company: Georgia Department of Transportation
Total Dollar Amount: \$172,242
Role: PI
Period of Contract: 9/21/2010–9/20/2012

Title of Project: AUMScore®, Multifamily Property Utility Benchmarking Program
Agency/Company: American Utility Management (AUM), Inc.
Total Dollar Amount: \$37,977
Role: PI
Period of Contract: 10/01/2010–06/30/2011

Title of Project: A Time Series Model for Forecasting Construction Cost Index
Agency/Company: Royal Institution of Chartered Surveyors (RICS), London, UK
Total Dollar Amount: \$7,287
Role: PI
Period of Contract: 05/01/2009–05/27/2010

Title of Project: Pricing Flexibility in Solar-Ready Homes
Agency/Company: Georgia Tech Foundation (GTF)
Total Dollar Amount: \$12,152
Role: PI
Period of Contract: 07/01/2010–06/30/2012

Title of Project: Uncertainty Analysis Games for Teaching Construction Risk Management
Agency/Company: Class of 1969 Teaching Fellow
Total Dollar Amount: \$1,000
Role: PI
Period of Contract: 12/01/2009–06/30/2012

E2. As Co-Principal Investigator

Title of Project: Incorporating Resilience Considerations in Transportation Planning, TSMO and Asset Management

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$499,895

Role: Co-PI

Collaborator: Adjo Amekudzi-Kennedy (PI) and Russell Clark (co-PI)

Period of Contract: 08/01/2020-01/31/2023

Title of Project: Development of Training Modules to Increase Usage and Understanding of Agency-Wide Software Programs

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$215,000

Role: Co-PI

Collaborator: Stephan Durham, University of Georgia (PI), Mi Geum Chorzepa and Sung Hee Sonny Kim, University of Georgia (co-PI)

Period of Contract: 08/15/2020-11/15/2022

Candidate's Share: ~23% (\$50,000)

Title of Project: The Living Building as a Catalyst for the Diffusion of Deep Decarbonization Technologies

Agency/Company: Global Change Program and Brook Byers Institute for Sustainable Systems (BBISS)

Total Dollar Amount: \$23,000

Role: Co-PI

Collaborator: Daniel Matisoff (PI)

Period of Contract: 11/1/2018–6/30/2019

Candidate's Share: ~12% (\$6,000)

Title of Project: Strategies for Communicating Quality Expectations for Environmental Service Contracts: Phase II

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$298,281

Role: Co-PI

Collaborator: Gordon Kingsley (PI), Juan Rogers (Co-PI), and Dan Matisoff (Co-PI)

Period of Contract: 08/09/17–08/08/19

Candidate's Share: ~15% (\$45,000)

Title of Project: Development of Implementation Plan for GDOT e-Construction Program

Agency/Company: Federal Highway Administration (FHWA) Accelerated Innovation Deployment (AID) Demonstration Program

Total Dollar Amount: \$55,000

Role: Co-PI

Collaborator: Stephan Durham, University of Georgia (PI)

Period of Contract: 08/09/17–11/15/18

Candidate's Share: ~30% (\$16,000)

Title of Project: FEW (Food-Energy-Water): Opportunities, Challenges, and Implications of a Nutrient Grid – A supplemental project to RIPS: Participatory Modeling of Complex Urban Infrastructure Systems

Agency/Company: National Science Foundation (NSF), EFRI Office of Emerging Frontiers in Research and Innovation (EFRI), ENG Directorate for Engineering

Total Dollar Amount: \$200,000

Role: Co-PI

Collaborators: John Crittenden (PI), Jennifer Clark (co-PI), Richard Fujimoto (co-PI), and Marc Weissburg (co-PI)

Period of Contract: 08/01/2015–08/01/2016

Candidate's Share: ~10% (\$20K)

Title of Project: FEW Workshop: Interactions of Food Systems with Water, Energy, and Transportation Systems – A supplemental project to RIPS: Participatory Modeling of Complex Urban Infrastructure Systems

Agency/Company: National Science Foundation (NSF), EFRI Office of Emerging Frontiers in Research and Innovation (EFRI), ENG Directorate for Engineering

Total Dollar Amount: \$100,000

Role: Co-PI

Collaborators: John Crittenden (PI), Jennifer Clark (co-PI), Richard Fujimoto (co-PI), and Marc Weissburg (co-PI)

Period of Contract: 08/01/2015–08/01/2016

Candidate's Share: ~10% (\$10K)

Title of Project: Strategies for Communicating Quality Expectations for Environmental Service Contracts

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$217,792

Role: Co-PI

Collaborators: Gordon Kingsley (PI), Juan Rogers (Co-PI), and Dan Matisoff (Co-PI)

Period of Contract: 08/15/2015–03/04/2017

Candidate's Share: ~10% (\$20K)

Title of Project: Effective Utilization of Disadvantaged Business Enterprises (DBE) in Alternative Delivery Projects: Strategies and Resources to Support the Achievement of DBE Goals

Agency/Company: Georgia Department of Transportation

Total Dollar Amount: \$75,000

Role: Co-PI

Collaborator: Adjo Amekudzi-Kennedy (PI)

Period of Contract: 04/06/2015–04/06/2016

Candidate's Share: ~50% (\$37K)

Title of Project: RIPS (Resilient Interdependent Infrastructure Processes and Systems) Type 2: Participatory Modeling of Complex Urban Infrastructure Systems (Model Urban SysTems)
Agency/Company: National Science Foundation (NSF), EFRI Office of Emerging Frontiers in Research and Innovation (EFRI), ENG Directorate for Engineering
Role: Co-PI
Total Dollar Amount: \$2,699,946
Collaborators: John Crittenden (PI), Jennifer Clark (co-PI), Richard Fujimoto (co-PI), and Marc Weissburg (co-PI)
Period of Contract: 09/01/2014–08/31/2017
Candidate's Share: ~10% (\$250K)

Title of Project: Managing a Portfolio of Projects – Metrics for Improvement
Agency/Company: Construction Industry Institute (CII)
Total Dollar Amount: \$250,000
Role: Co-PI
Collaborators: Ali Touran, Northeastern University (PI), and Ed Minchin, University of Florida (co-PI)
Period of Contract: 09/01/2012–08/31/2014
Candidate's Share: ~25% (\$60,274)

E3. As Senior Personnel or Contributor

Title of Project: Solar, Installation, Mounting, Production, Labor, and Equipment Balance of System (SIMPLE BoS)
Agency/Company: Department of Energy's (DOE's) SunShot Initiative
Total Dollar Amount: \$2.87M
Role: Contributor
Collaborators: Georgia Tech Research Institute (GTRI) (PI), Suniva (co-PI), and Radiance Solar (co PI)
Period of Contract: 09/01/2012–08/31/2014
Candidate's Share: ~3% (\$55,889)

F. Other Scholarly and Creative Accomplishments

F1. Invention Disclosures

GTRC-5807: "Peer-to-peer Energy (Water) Benchmarking Model for the Multifamily Building Industry."

G. Societal and Policy Impacts

G1. Press and Media Coverage

- 1) "Atlanta Is Home to Largest Permeable Pavers Project in US"
Interviewed by the WABE's (Atlanta's NPR[®] Station) Tasnim Shamma to talk about the city's Southeast Atlanta Green Infrastructure Initiative (the largest permeable paver project in North America), November 1, 2015. Available at: <http://news.wabe.org/post/atlanta-home-largest-permeable-pavers-project-us>.
- 2) "It's not easy going green"
Interviewed by the Georgia Public Broadcasting (GPB) "On Second Thought" host Celeste Headlee to discuss the challenges and benefits of going green (with the Atlanta Stadium

General Manager Scott Jenkins and Liza Milagro of Hartsfield–Jackson), May 19, 2015. Available at: <https://soundcloud.com/onsecondthought/its-not-easy-going-green>.

- 3) “Corporate Real Estate 2020 Final Report: Sustainability”
Professional Leader Interviewed by CoreNet Global, Inc., May 2012.
- 4) “Corporate Real Estate 2020 Final Report: Partnering with Key Support Functions”
Professional Leader Interviewed by CoreNet Global, Inc., May 2012.
- 5) “Georgia Tech researcher sheds light on the creation of AUMScore®”
Posted on the American Utility Management (AUM) weblog at: <http://blog.aum-inc.com/2011/12/08/georgia-tech-researcher-sheds-light-on-the-creation-of-aumscore/>.

G2. Changes to Government Policy

Effective July 1, 2012, Georgia legislators approved an increase in the level of using design–build for transportation projects by raising the cap to 50% (in dollars) of the total amount of construction projects awarded in the previous fiscal year. Additionally, effective July 1, 2013, Georgia legislators revised the DB code to allow for Best Value Design–Build contracting. These changes were made possible, in part, by solid design–build project suitability assessments that Dr. Ashuri’s research enhanced for future use.

G3. K-12 Outreach or Diversity-related Initiatives

Georgia Intern Fellowships for Teachers (GIFT) Program: Dr. Ashuri was advisor for 3 high school teachers and 30 high school students through the Georgia Intern Fellowships for Teachers (GIFT) program in 4-week summer research boot camps, summers 2010–2018. Dr. Ashuri collaborated with the Georgia Tech Center for Education Integrating Science, Mathematics and Computing (CEISMC) in these boot camps. Financial supports were provided through the Georgia Intern Fellowships for Teachers (GIFT) program. Students came from South Cobb and Rockdale County High Schools – both are classified as “High Needs” Title I.

H. Other Professional Activities

H1. Consulting and Advising

- Federal Highway Administration (FHWA)
- Design-Build Institute of America (DBIA), Washington, DC
- Royal Institution of Chartered Surveyors (RICS), London, United Kingdom
- Ampirix, Atlanta, GA
- Atlanta Committee for Progress (ACP), Atlanta, GA
- The Holloway Consulting Group, LLC, Denver, CO
- ecolnsight

V. Education

A. Courses Taught

Semester, Year	Course Number	Course Title	Number of Students
Fall, 2020	BC 7100	Quantitative Methods for Construction Research	4
Fall, 2020	CEE 8813-B	Quantitative Methods for Construction Research	3
Fall, 2020	BC 7200	Advanced Readings in Building Construction	1
Spring, 2020	BCP 6900	Economic Analysis, Risk Management, Risk Financing, & Insurance for Safety Professionals	19
Spring, 2020	CEE 4803-A	Infrastructure Finance	18
Spring, 2020	CEE 4150	Construction Management & Megaprojects	31
Fall, 2019	BC 7100	Quantitative Methods for Construction Research	4
Fall, 2019	BC 7200	Advanced Readings in Building Construction	1
Spring, 2019	BCP 6900	Economic Analysis, Risk Management, Risk Financing, & Insurance for Safety Professionals	19
Spring, 2019	CEE 4150	Construction Management & Megaprojects	19
Fall, 2018	BC 7100	Quantitative Methods for Construction Research	6
Summer, 2018	BC 7200	Advanced Readings in Building Construction	1
Spring, 2018	CEE 4803	Construction Management & Megaprojects	17
Fall, 2017	BC 7100	Quantitative Methods for Construction Research	12
Summer, 2017	BC 7100	Quantitative Methods for Construction Research	1
Fall, 2016	BC 7100	Quantitative Methods for Construction Research	18
Fall, 2016	BC 7200	Advanced Readings in Building Construction	1

Spring, 2016	CEE 4803-SLS	Construction Management & Megaprojects	46
Spring, 2016	BC 7200	Advanced Readings in Building Construction	1
Spring, 2015	BC 6250	Value Management for Integrated Facility Design and Construction	29
Spring, 2015	BC 4610	Value Engineering & Building Economics	21
Spring, 2015	BC 7200	Advanced Readings in Building Construction	3
Fall, 2014	BC 7100	Quantitative Methods for Construction Research	16
Fall, 2014	BC 7200	Advanced Readings in Building Construction	2
Fall, 2014	BC 3630	Project Management I	17
Spring, 2014	BC 7200	Advanced Readings in Building Construction	1
Spring, 2014	BC 6250	Value Management for Integrated Facility Design and Construction	11
Spring, 2014	BC 4610	Value Engineering & Building Economics	18
Fall, 2013	BC 7200	Advanced Readings in Building Construction	1
Spring, 2013	BC 6250	Value Management for Integrated Facility Design and Construction	15
Spring, 2013	BC 8803 / BC 4803	Productivity Analysis for Solar Contractors	4
Spring, 2013	BC 4610	Value Engineering & Building Economics	25
Spring, 2013	BC 7200	Advanced Readings in Building Construction	3
Fall, 2012	BC 7100	Quantitative Methods for Construction Research	14
Fall, 2012	BC 7200	Advanced Readings in Building Construction	4
Spring, 2012	BC 6250	Value Management for Integrated Facility Design and Construction	29
Spring, 2012	BC 4610	Value Engineering & Building Economics	40
Spring, 2012	COA 8996	Qualifying Paper	1

Spring, 2012	COA 8999	Prep-Doctor Dissertation	1
Fall, 2011	BC 6550	Design & Construction Processes	29
Fall, 2011	BC 7100	Quantitative Methods for Construction Research	9
Fall, 2011	COA 8996	Qualifying Paper	1
Spring, 2011	BC 6250	Value Management for Integrated Facility Design and Construction	41
Spring, 2011	BC 4610	Value Engineering & Building Economics	34
Fall, 2010	BC 6550	Design & Construction Processes	34
Fall, 2010	BC 7100	Quantitative Methods for Construction Research	13
Spring, 2010	BC 6250	Value Management for Integrated Facility Design and Construction	30
Fall, 2009	BC 8823	Advanced Cost and Financial Management in AEC+FM	6
Fall, 2009	BC 7100	Quantitative Methods for Construction Research	18
Spring, 2009	BC 4610	Value Engineering & Building Economics	55
Fall, 2008	BC 3630-A	Project Management I	27
Fall, 2008	BC 3630-B	Project Management I	29
Fall, 2008	BC 7100	Quantitative Methods for Construction Research	20

B. Individual Student Guidance

B1. Ph.D. Students

Ph.D. Students – Principal Advisor

Yashovardhan Jallan

Date of Graduation: August 2020

Thesis Topic: *Text Mining of the Securities and Exchange Commission Financial Filings of Publicly Traded Construction Firms Using Deep Learning to Identify and Assess Risk*

Current Position: Financial Engineer, John Hancock, Boston, MA

- Completed a week-long Dissertation Writing Boot-camp Workshop organized by Communication Lab, Georgia Tech, December 9–13, 2019.
- Competed in a team of students and industry professionals at Tech Blitz (a CEE daylong hack-a-thon style competition addressing opportunities in the AEC industry), Nov 15, 2019.
- Attended a Research Development Workshop on Grant Writing, conducted by Hanover Associates, October 4, 2019.
- Invited Speaker at Digital Building Lab (DBL) Industry Days, Atlanta, GA, May 8–9, 2019.
- Invited Speaker at the ASCE Construction Institute (CI) Summit, Atlanta, GA, March 7–9, 2019.
- Received the Hardin Fellowship to support his research in Construction and Infrastructure Systems Engineering.

Arezoo Shirazi

Date of Graduation: May 2019

Thesis Topic: *Embodied Life Cycle Assessment and Potential Environmental Impacts of Improvement Options for Detached Single Family Houses in Atlanta*

Current Position: Lecturer, School of Built Environment, University of Technology Sydney (UTS), Australia

- Recipient of the 2017 ASC Best Graduate Student Poster Award for the poster “Life Cycle Energy Analysis of Single Family Residential Buildings Over Decades: Atlanta Case Study” in *the 53rd Associated Schools of Construction (ASC) Conference*, Seattle, WA, April 5–8, 2017.
- Received the Associated Schools of Construction (ASC) Travel Award to present her research at *the 53rd Associated Schools of Construction (ASC) Conference*, Seattle, WA, April 5–8, 2017.
- Received the Associated Schools of Construction (ASC) Region 2 Travel Award to present her research at the *Associated Schools of Construction (ASC) Conference for Region 2*, Peachtree City, GA, November 2, 2016.

Yang Cao

Graduation Date: May 2019

Thesis Topic: *Modeling and Predicting the Variation of US Highway Construction Cost*

Current Position: Quantitative Associate, Wells Fargo Bank, Charlotte, NC

Minsoo Baek

Date of Graduation: August 2018

Thesis Topic: *Quantitative Analysis for Modeling Uncertainty in Construction Costs of Transportation Projects with External Factors*

Current Position: Assistant Professor, Department of Construction Management, Kennesaw State University (KSU)

- Recipient of the 2018 ASC Best Graduate Student Poster Award for the poster “Modeling Spatial Heterogeneity to Establish Local Construction Cost Models for Highway Projects” in

the 54th Associated Schools of Construction (ASC) Conference, Minneapolis, MN, April 18–21 2018.

- Received the Associated Schools of Construction (ASC) Region 2 Travel Award to present his research at the *Associated Schools of Construction (ASC) Conference for Region 2*, Peachtree City, GA, November 2, 2016.

Jun Wang

Date of Graduation: May 2017

Thesis Topic: *Benchmarking Building Energy in the Multifamily Industry: A Data Envelopment Analysis (DEA) Model*

Current Position: Cross-Asset Structuring, Barclays, Hong Kong

- Received the Anderson Fellowship for his research in Sustainable Engineering.

Mohsen Shahandashti

Date of Graduation: May 2014

Thesis Topic: *Analysis of Construction Cost Variations Using Macroeconomic, Energy and Construction Market Information*

Current Position: Assistant Professor, Department of Civil Engineering, The University of Texas at Arlington

- Received the Second Place Poster Award in the 2014 ASCE Construction Research Congress, Atlanta, GA, May 19–21, 2014.
- Selected as the finalist in the 2013 Construction Industry Institute (CII) poster competition, Orlando, FL, July 29–31, 2013.
- Received the 2013 Construction Industry Institute (CII) Annual Conference Registration Award, Orlando, FL, July 29–31, 2013.
- Received the 2013 INFORMS (Institute for Operations Research and the Management Sciences) conference registration award.
- Awarded the 2011 IFMA (International Facility Management Association) Foundation Graduate Scholarship.

Hamed Kashani

Date of Graduation: May 2012

Thesis Topic: *A Real Options Model for the Financial Valuation of Infrastructure Systems under Uncertainty*

Current Position: Assistant Professor, Department of Civil Engineering, Sharif University of Technology, Tehran, Iran

- Selected as the finalist in the 2011 Construction Industry Institute (CII) poster competition, Chicago, IL, July 25–27, 2011.
- Received the 2011 Construction Industry Institute (CII) Annual Conference Registration Award, Chicago, IL, July 25–27, 2011.

Yunping Liang

Passed Written Qualifying Exam in Summer 2018

Passed Oral Qualifying Exam in Spring 2019

- Received the NSF travel fund to attend the “Applications to Interviews (A2I): Preparing for the Faculty Job Market” Workshop at the CRC 2020 Conference, Phoenix, AZ, Feb. 2020.

- CIRTL (Center for the Integration of Research, Teaching, and Learning) Associate Level Certificate, 2020
- Invited by the McWhorter School of Building Science at Auburn University to present to students in the newly established Ph.D. program in Building Construction about “Things I wish I’d Known When I Started My PhD: Capacity-Building Advices for Academic Skills Strengthening and Mental Health Maintaining.” October 12, 2020.
- Tech to Teaching Certificate, a multi-semester preparing future faculty program that includes pedagogy training and practice, Center of Teaching and Learning, Georgia Tech, 2020
- Member, Subcommittee on Research (ABE10(3)), Standing Committee on Revenue and Finance, Transportation Research Board (TRB), Jan. 2019- present
- Reviewer, 2020 Fall Georgia Tech President's Undergraduate Research Salary Award, Jun. 2020
- Reviewer, 2020 Spring Georgia Tech President's Undergraduate Research Salary Award, Oct. 2019
- Reviewer, 2020 Transportation Research Board (TRB) Annual Meeting, Sept. 2019
- Reviewer, 2020 ASCE Construction Research Congress (CRC) Conference, Aug. 2019
- Anne Robinson Clough International Student Scholarship, November 2019.
- Session Chair, Big Data and Machine Learning 2, the 2019 ASCE International Conference on Computing in Civil Engineering (i3CE), June 2019.
- Selected as a 2019/2020 CEE Future Faculty Fellow.
- Participated in the Tech to Teaching Program, 2019–present.
- Received the Georgia Tech College of Engineering Travel Award to present research at the 2019 Engineering Project Organizations Conference (EPOC), Vail, CO, March 2019.
- Received the Georgia Tech Graduate Conference Fund to present research at the 2019 Engineering Project Organizations Conference (EPOC), Vail, CO, March 2019.
- Received the Associated Schools of Construction (ASC) Region 2 Travel Award to present his research at the Associated Schools of Construction (ASC) Conference for Region 2, Peachtree City, GA, October 25, 2018.

Jung Hyun Lee

Advisement Began: Fall 2018

- Active Committee Member - ASCE Infrastructure Systems Committee, Oct. 2020 – Present
- Committee Communication Coordinator and Active Committee Member - Transportation Research Board (TRB) AFH20 Quality Assurance Management, May 2018 – Present
- Invited Speaker at the *5th Annual UTC Conference for the Southeastern Region*, J. Wayne Reitz Union, University of Florida, Gainesville, FL, November 16-17, 2017.
- Instructor of Record, BC4130/6550 Design and Construction Processes, Summer 2020 and Fall 2020

Mingshu Li

Passed Written Qualifying Exam in Spring 2019

Passed Oral Qualifying Exam in Spring 2019

Fredrick Chung

Passed written comprehensive exam in Summer 2020

Heung Jin Oh

Advisement Began: Fall 2019

Shiqin Zeng

Advisement Began: Spring 2020

Ph.D. student in Computational Science and Engineering (CSE)

Ph.D. Students – Co-Principal Advisor

Michael Hatcher

Date of Graduation: December 2015

Thesis Topic: *Evaluating Supplier Diversity Development Programs (SDDP) From the Diverse Supplier Enterprise (DSE) Perspective in the Facility Management Industry*

Co-Advisor: Kathy Roper, School of Building Construction, Georgia Tech

Current Position: President at Sovereign Construction & Development

John Fard

Date of Graduation: May 2015

Thesis Topic: *An Evaluation of Home Hospital Care Impacts on Emergency Department Crowding Using Simulation*

Co-Advisor: Kathy Roper, School of Building Construction, Georgia Tech

Current Position: Project Manager at CBRE Healthcare, San Francisco, CA

Arya Sedehi

Date of Graduation: May 2015

Thesis Topic: *Evaluating the Impacts of Enterprise Resource Planning Investment on Organizational Performance for Small to Medium Manufacturing Enterprises*

Co-Advisor: Kathy Roper, School of Building Construction, Georgia Tech

Current Position: Senior Manager – Continuous Improvement Productivity at The Schwan Food Company, Atlanta, GA

Mehdi Tavakolan

Date of Graduation: August 2011

Thesis Topic: *Development of Construction Projects Scheduling with Evolutionary Algorithms*
Department of Civil Engineering and Engineering Mechanics, Columbia University, New York, New York

Co-Advisor: Nicola Chiara, Assistant Professor, Department of Civil Engineering and Engineering Mechanics, Columbia University, New York, New York

Current Position: Assistant Professor, School of Civil Engineering, University of Tehran, Iran

B2. M.S. Students

Masters' Thesis – Principal Advisor

Lier Liu

Advisement Began: Summer 2020

Thesis Topic: *Construction Quality Acceptance Model for Transportation Design-Build Projects*

Yuxin Zhou

Date of Graduation: December 2019

Thesis Topic: *Challenges and Practices of Design Professional Liability Policies in Design–Build Projects*

Current Position: Field Engineer, M&J Engineering, P.C., New Hyde Park, NY

Jung Hyun Lee

Date of Graduation: May 2018

Thesis Topic: *Changes in Quality Management Approaches for Design–Build Highway Projects*

Current Position: Ph.D. Student, School of Building Construction, Georgia Tech

Shiva Bahrami

Date of Graduation: May 2018

Thesis Topic: *State DOTs’ Professional Staffing Challenges and Practices for Successful Development of Design Build Delivery Projects*

Current Position: Project Engineer at Southeast Restoration and Fireproofing Co., Inc., Stone Mountain, GA

- Received the Hardin Fellowship to support her research in Construction and Infrastructure Systems Engineering

Mingyang Li

Date of Graduation: December 2016

Thesis Topic: *Neighborhood Racial Composition, Neighborhood Wealth, and the Surrounding Food Environment in Metro Atlanta Area*

Current Position: Transportation Engineer/Planner, WSP USA, Atlanta, GA

David Hannon

Date of Graduation: August 2013

Thesis Topic: *Environmental Risks and Management Strategies in Design–Build Contracting*

Current Position: Chief Operating Officer – I-77 Mobility Partners – Cintra US, Charlotte, NC Area

Robert Stephenson

Date of Graduation: December 2012

Thesis Topic: *The Effects of Green Building Certification on Housing Prices in the State of Georgia*

Current Position: Associate Director | Data and Technical Services at Vermont Energy Investment Corporation, Burlington, VT

Austin Dingwall

Date of Graduation: December 2012

Thesis Topic: *Multi - Objective Genetic Algorithm Use in Building Energy Analysis*

Current Position: Project Architect, Moor, Baker & Associates Architects, P.A., Vero Beach, FL

Bryan C. Pope

Date of Graduation: May 2012

Thesis Topic: *A Detailed Case Study of Energy Retrofits in Atlanta’s Chastain Park*

Current Position: Director, Facilities and Administrative Operations, King & Spalding, Atlanta, GA

Melvin B. Whatley

Date of Graduation: May 2011

Thesis Topic: *Life-cycle Cost–benefit Analysis of Green Roofing Systems: The Economic and Environmental Impact of Installing Green Roofs on All Atlanta Public Schools*
Current Position: Manager – Data & Analytics at Protiviti, Atlanta, GA

Mothusi Phometsi

Date of Graduation: August 2010
Thesis Topic: *Economic Evaluation of Flexible Partitions*
Current Position: President & CEO at Strategic Projects, Tucker, GA

Kenneth Corsini

Date of Graduation: December 2009
Thesis Topic: *Statistical Analysis of Residential Housing Prices in an Up and Down Real Estate Market: A General Framework and Study of Cobb County, GA*
Current Position: Owner, Georgia Residential Partners, LLC, Greater Atlanta Area

Other Graduate Students Advised & Funded in Dr. Ashuri' s Research Lab

Sohail Haroon

August 2020–Present
Research Topic: *Assessment of Organizational Structures of Design–Bid–Build Programs across State Departments of Transportation (State DOTs)*
Current Position: Consulting Instructor (GT); MBA Candidate (GT); Sustainability Fellow (GT); Lead engineer (URE)

Eryn Kim

August 2020–Present
Research Topic: *Virtual Public Involvement (VPI) for Transportation Planning and Environmental Analysis*

Emilio J. Quintana

October 2020–Present
Research Topic: *Updating Transportation Construction Manual to Reflect Emerging Technologies*

Raj Sanjaybhai Shah

January–May 2019
Research Topic: *Assessment of Organizational Structures of Design–Bid–Build Programs across State Departments of Transportation (State DOTs)*
Current Position: Project manager, Jacobs Engineering

Hoon Na

January–December 2019
Research Topic: *Characterization and Classification of Expenditure Cash Flows of Highway Construction Projects*

Jinhao Jiang

January–May 2019 and August–December 2019
Research Topic: *Identification of Economic Indicators Affecting Highway Construction Cost*

Heung Jin Oh

December 2018–May 2019

Research Topic: *Market Analysis of Major Transportation Public–Private Partnership (P3) Projects*

Sulekha Singh

August 2017–December 2018

Research Topic: *Leveraging the Blockchain Technology in AEC Industry during the Design Development Phase*

Current Position: VDC Engineer, Turner Construction Company, Atlanta, GA

Arash Moradi

January 2017–May 2018

Research Topic: *Risk Identification & Mitigation for the Pre-Construction Phase of Highway Project Delivery*

Current Position: Project Manager, Hannan Construction LLC, Atlanta, GA

Yan Li

August 2015–May 2017

Research Topic: *Real Estate of Green Certified Homes*

Current Position: Office Manager at China Construction America, Morristown, New Jersey

Hwayeong Choi

August 2016–December 2016

Research Topic: *Quality Assurance/Quality Control (QA/QC) for Transportation Design–Build Projects*

Mostafa Reisi

August 2013–August 2015

Research Topic: *Real Options Valuation of Building Solar Systems*

Current Position: Ph.D. Student, The H. Milton Stewart School of Industrial and Systems Engineering, Georgia Tech

Jian Lu

January 2009–May 2011

Research Topic: *Construction Cost Index Forecasting*

Current Position: Vice President – Equity Structuring Group, Deutsche Bank, New York, NY

Chaehee Han

Research Topic: *Best Practices for Budget-based Design in Highway Projects*

August 2014–December 2015

Current Position: Cost Manager, Turner & Townsend, New York, NY

- Awarded the 2015 IFMA (International Facility Management Association) Foundation Graduate Scholarship.

Yuna Zhang

Research Topic: *Real Options Valuation of Solar Systems for Buildings*

January 2014–August 2015

Current Position: Building Performance Analyst, Baumann Consulting, Washington, DC

Aakash Arun

Research Topic: *Design–Build–Finance for Highway Projects*

August 2013–August 2014

Current Position: Senior Consultant at Secretariat International, Atlanta, GA

Yun Zhou

Research Topic: *Risk Assessment for Highway Projects*

December 2013–May 2014

Current Position: Cost Manager, Turner & Townsend, New York, NY

Soheil Shayegh

Research Topic: *Assessment of Price Adjustment Clauses*

May 2013–May 2014

Graduated: Ph.D. in Industrial & Systems Engineering, August 2014

Current Position: Research Fellow at Università Bocconi, Milano, Lombardy, Italy

- Recipient of the 2017 ASCE Thomas Fitch Rowland Award for the paper entitled “Price Adjustment Clauses and Submitted Bid Prices for Major Asphalt Line Items in Highway Projects” published in the ASCE Journal of Construction Engineering & Management (This paper was also nominated for the ASCE Arthur M. Wellington Award. The paper was coauthored by Mohammad Ilbeigi, Baabak Ashuri, and Soheil Shayegh).

Irma Natalia Quintanilla Tamez

Research Topic: *Time and Motion Studies for Solar Contractors*

March 2013–May 2014

Current Position: Building Science Specialist, Adrian Smith + Gordon Gill Architecture, Chicago, IL

Yang Hui

Research Topic: *Statistical Analysis to Determine Structural Breaks in Historical Asphalt Cement Price Data*

June 2012–August 2013

Current Position: Ph.D. Student, Scheller College of Business, Georgia Tech

Masters Students Conducted Independent Studies**Xinyi Zhang**

Research Topic: *Relationship between Project Factors and Project Performance of P3 Projects Based on World Bank Data*

Spring 2020

Sunghyun Jee

Research Topic: *Effects of Financial Crisis on the Performance of P3 Enterprises*

Spring 2019

Justin Pritchard

Research Topic: *Classification of Highway Project Projects*

Fall 2019

Current Position: Project Manager at AECOM

Mahima Saravanan

Research Topic: *Advances in Building Information Modeling (BIM) Application throughout the Building Lifecycle*

Fall 2018

Current Position: M.S. Student, School of Building Construction, Georgia Tech

Wenhui Yang

Research Topic: *Cost–Benefit Analysis on Social Impacts of Atlanta Streetcar System Emissions*

Spring 2017

Current Position: Graduate Research Assistant, School of Civil & Environmental Engineering, Georgia Tech

Negar Ahsan

Research Topic: *General Analysis, Regarding to Profit and Potential of Living Walls*

Spring 2015

Current Position: Design and Construction Engineer, MCN Build, Washington, DC

Mohammad Ali Kafee Razavi

Research Topic: *Infrastructure Asset Management and Finance for Airports*

Spring 2013

Current Position: Project Manager, Materials Manager and Engineers, Inc. (2MNEXT), Atlanta, GA

Dave Patel

Research Topic: *Building Information Modeling (BIM) in Landscape Architecture*

Spring 2012

Current Position: Graduate Student at the University of Georgia, Athens, GA

James Cox

Research Topic: *Public–Private Partnerships: Delivering Infrastructure Projects in the United States Utilizing Public–Private Partnerships*

Summer 2011

Ian Hoffman

Research Topic: *Evaluation of Procurement Methods for Transportation Project Delivery using Design–Build Project Delivery Systems*

Summer 2011

Current Position: Architect at Niles Bolton Associates, Atlanta, GA

Ryan Howard

Research Topic: *Integrated Project Delivery, A look at IPD and Its Place in the Current Economy*

Summer 2011

Current Position: Director, Construction and Facility Management, HD Supply, Atlanta, GA

Mccoys Jamison

Research Topic: *Universal Design: The Cost of Convenience*

Spring 2010

Current Position: Digital Marketing Automation Consultant, The Real McCoy Marketing and Media, Hartford, CT

Afshin Jonaidi Jafari

Research Topic: *Application of Infrastructure Asset Management in Airport Pavement Management System*

Fall 2009

Current Position: Project Manager and Site Safety Manager at KSK Construction Group, New York, NY

Sami Kolahdoozan

Research Topic: *Economic Evaluation of Hybrid Heating, Ventilation, and Air Conditioning (HVAC) Systems under Utility Price Uncertainty*

Fall 2009

Current Position: Project Manager at Southeast Restoration and Fireproofing Co., Inc., Stone Mountain, GA

B3. Undergraduate Students

Meera Ravikumar

Research Topic: *Holistic Review of Emerging Safety and Health Issues in the Wake of COVID-19*
Spring 2021

Colin Gough

Research Topic: *Smart Traffic Monitoring and Communication System to Improve Safety, Connectivity, and Efficiency*

Fall 2020 and Spring 2021

Morgan McGuinn

Research Topic: *Machine Learning Algorithms for Lumpsum Cost Estimating*

Fall 2020 and Spring 2021

Aaron Weil

Research Topic: *Smart Traffic Monitoring and Communication System to Improve Safety, Connectivity, and Efficiency*

Fall 2020

Tenesha S. Kittrell

Research Topic: *Building Sustainable Cities through Sustainable and Resilient Infrastructure*

Fall 2015 and Spring 2016

Current Position: Project Engineer at Aspen Heights Partners, Atlanta, GA

- Received the National Association of Women in Construction NAWIC Founders' Scholarship Foundation (NFSF) for the year 2015–2016.

Sung Jun Park

Research Topic: *Real Estate Value of Green Buildings*

Spring 2015

Current Position: Transportation/Traffic Engineer at Jacobs, Atlanta, GA

Jonathan Nathan

Research Topic: *Financial Assessment of Renewable Energy Systems and Sustainable Technologies for the Built Environment*

Summer 2014

Current Position: M.S. Student, School of Building Construction, Georgia Tech

Seungho (Andrew) Shin

Research Topic: *Modeling Probabilistic Risk Assessment for Volatility of Transportation Construction Material Prices*

Fall 2013

Current Position: Assistant Manager at Deloitte, London, United Kingdom

- Received the Fall 2013 President's Undergraduate Research Award (PURA), July 2013

Bo-Na Lee

Research Topic: *Asphalt Cement Price Prediction*

Fall 2012 and Spring 2013

Hongfan (Kevin) Chen

Research Topic: *The Impact of Energy Market on the Construction Market*

Spring 2012

Current Position: Ph.D. Student at the University of Chicago Booth School of Business, Chicago, IL

Seungho (Andrew) Shin

Research Topic: *State of Practice of Transportation Design-Build in the U.S.*

Fall 2012

Current Position: Assistant Manager at Deloitte, London, UK

- Received the Fall 2012 President's Undergraduate Research Award (PURA), July 2012.

Rohit Joshi

Research Topic: *Energy Benchmarking Using Data Envelopment Analysis*

Spring 2011

Current Position: Marketing & Sales at Access Vascular, New York, NY

Brittany Malnar

Research Topic: *Energy Efficient Renovation of Existing Structures*

Spring 2011

Current Position: Regional Project Manager at Kroger, Atlanta, GA

Eran Mordel

Research Topic: *Construction Cost Analysis*

Spring 2011

Current Position: MBA Candidate at Columbia Business School, New York, NY

Ritika Thapar

Research Topic: *Evaluation of Design-Build Request for Proposals (RFPs) of Utah and Florida Departments of Transportation*

Spring 2011

Current Position: Deputy Project Manager at AECOM, Dubai, United Arab Emirates

Jingwei Zhou

Research Topic: *Life Cycle Cost Analysis and Risk Analysis of Highway Improvement and Expansion*
Fall 2010

Current Position: Product Manager, Rideshare, San Francisco, CA

- Received the Fall 2010 President's Undergraduate Research Award (PURA), July 2010.

Ian Balmaseda

Research Topic: *Linking between Real Estate Asset Performance and Sustainability in terms of Green Building Certification*

Fall 2010

Current Position: Student at The Wharton School, University of Pennsylvania, Philadelphia, PA

Emily Connor

Research Topic: *Analyzing and Strengthening Sustainability Initiatives in the City of Atlanta*

Fall 2010

Current Position: Senior Director of Environmental, Health, and Safety, Schenectady, NY

Seungho (Andrew) Shin

Research Topic: *Regression Analysis Model for Predicting Construction Cost Index*

Fall 2009 and Spring 2010

Current Position: Assistant Manager at Deloitte, London, UK

- Received Outstanding Poster Presentation Award for research on "Regression Analysis Model for Predicting Construction Cost Index" in Georgia Tech's Undergraduate Research Spring 2010 Symposium, March 16, 2010.
- Received the Fall 2009 President's Undergraduate Research Award (PURA), July 2009.

Trai Nguyen

Research Topic: *Life Cycle Cost Analysis Using Real Options Analysis*

Spring 2010

Current Position: Senior Engineer at AT-PAC Complete Scaffolding Solutions, Atlanta, GA

Rustann Solomero

Research Topic: *Models for Prediction Construction Cost*

Fall 2009

Current Position: Manager, Perpetual Funds at CIM Group, Los Angeles, CA

- Received the Fall 2009 President's Undergraduate Research Award (PURA), July 2009.

B4. Service on Thesis or Dissertation Committees**Ph.D. Committee Member****Perna Singh**

Thesis Topic: *Development of Valuation Framework for Adaptation of Infrastructure for System Resilience*

Advisor: Adjo Amekudzi-Kennedy, School of Civil & Environmental Engineering, Georgia Tech

Admitted to Ph.D. candidacy in October 2019

Sungil Hong

Advisor: Eunhwa Yang, School of Building Construction, Georgia Tech
Admitted to Ph.D. candidacy in January 2021

Irish Horsey

Thesis Topic: *Disadvantage Business Enterprises: Effect of Government Contracting and Competing in the Construction Marketplace*

Advisor: Javier Irizarry, School of Building Construction, Georgia Tech

Current Position: Interim Department Chair and Assistant Professor of Construction Management at Kennesaw State University (KSU)

Soowon Chang

Thesis Topic: *Decision support framework for transforming urban buildings at multiple scales*

School of Building Construction

Graduated: May 2020

Advisor: Daniel Castro, School of Building Construction, Georgia Tech

Current Position: Assistant Professor, School of Construction Management Technology, Purdue University

Janille Smith-Colin

Thesis Topic: *The Role of Regional Stakeholder Partnerships in Transportation Project Delivery and Implementation: Assessing Collaboration and Performance*

School of Civil & Environmental Engineering

Graduated: December 2017

Advisor: Adjo Amekudzi-Kennedy, School of Civil & Environmental Engineering, Georgia Tech

Current Position: Assistant Professor, Lyle Civil and Environmental Engineering Department, Southern Methodist University, Dallas, TX

Chih-Pin Hsiao

Thesis Topic: *Toward Semantic Model Generation from Sketch and Multi-Touch Interactions*

School of Architecture

Graduated: December 2015

Advisor: Chuck Eastman, School of Architecture, Georgia Tech

Current Position: User Interaction Lead Software Engineer R&D, Vectorworks, Atlanta, GA

Richard S. Boadi

Thesis Topic: *Integrated Asset Management Framework: Using Risk-Based Decision-Support Systems to Manage Ancillary Highway Assets*

Graduated: May 2015

Advisor: Adjo Amekudzi-Kennedy, School of Civil & Environmental Engineering, Georgia Tech

Current Position: Senior Consultant, Transportation Asset Management at Wood, Washington, DC

Christopher Toth

Thesis Topic: *Empirical Study of the Effect of Off-ramp Queues on Freeway Mainline Traffic Flow*

Graduated: December 2014

Advisors: Jorge Laval and Randall Guensler, School of Civil & Environmental Engineering, Georgia Tech

Current Position: Connected and Automated Vehicle Systems Engineer, WSP, Columbus, OH

Robert B. Austin

Thesis Topic: *Successful Delivery of Flash Track Projects*

Graduated: December 2015

Advisors: Pardis Pishdad-Bozorgi and Kathy Roper, School of Building Construction, Georgia Tech

Current Position: Assistant Professor at Bowling Green State University, Bowling Green, OH

Soheil Rouhi

Thesis Topic: *Framework for Owner's Project Requirement for Total Structural System (OPRTSS)*

School of Building Construction, Georgia Institute of Technology

Graduated: August 2011

Advisors: Roozbeh Kangari, Kathy Roper, and Saied Sadri, School of Building Construction, Georgia Tech

Current Position: Member at Structural Consulting Group LLC, Alpharetta, GA

Stephanie C. Thompson

Thesis Topic: *Rational Design Theory: A Decision-based Foundation for Studying Design Processes*

G.W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology

Graduated: May 2011

Advisor: Chris Paredis, G.W. Woodruff School of Mechanical Engineering, Georgia Tech

Current Position: Executive Director, Waterford Foundation, Washington, DC

Charner Rodgers

Thesis Topic: *High Occupancy Toll Lanes Ignoring the Potential for a Violation of Environmental Justice*

School of Building Construction, Georgia Institute of Technology

Graduated: May 2011

Advisors: Linda Thomas-Mobley and Roozbeh Kangari, School of Building Construction, Georgia Tech

Current Position: Associate Professor, Robert R. Taylor School of Architecture and Construction Science and Management, Department of Construction Science and Management, Tuskegee University

Jun Ha Kim

Thesis Topic: *Artificial Neural Network (ANN) based Decision Support Model for Alternative Workplace Arrangements (AWA): Readiness Assessment and Type Selection*

College of Architecture, Georgia Institute of Technology

Graduated: December 2009

Advisors: Kathy Roper and Roozbeh Kangari, School of Building Construction, Georgia Tech

Current Position: Associate Professor, Kyung Hee University, Dongdaemun-gu, Seoul, Korea

Ph.D. Committee Member (Outside Georgia Tech)

Wenying Ji

Thesis Topic: *Simulation-based Analytics for Quality-Associated Decision Support*

Construction Engineering and Management Program, Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Alberta, Canada

Graduated: December 2017

Advisor: Simaan Abourizk, Distinguished University Professor and Canada Research Chair in Operations Simulation at the University of Alberta

Current Position: Assistant Professor, Sid and Reva Dewberry Department of Civil, Environmental, and Infrastructure Engineering, George Mason University

Reza Masoumi

Thesis Topic: *A Framework for Project Portfolio Formation Using a Hybrid of Multicriteria Decision-making Methods*

Department of Civil and Environmental Engineering, Northeastern University, Boston, MA

Graduated: May 2016

Advisor: Ali Touran, Professor, Department of Civil and Environmental Engineering, Northeastern University

Current Position: Project Manager at EORC, Iran

Jussi Vimpari

Thesis Topic: *Is There Hidden Value in Real Estate Investments? Real Options Analysis Provides Rationale to Contingent Investment Decisions*

Department of Real Estate, Planning and Geoinformatics, School of Engineering, Aalto University, Otaniemi, Espoo, Finland

Graduated: December 2014

Advisor: Seppo Junnila (Dr.Tech.), Professor, Real Estate Business, School of Engineering, Aalto University

Current Position: Co-Founder, yourSpace, Helsinki, Finland

Wei Wang

Thesis Topic: *Multivariate Stochastic Copula-based Deterioration Models in Infrastructure Economic Risk Management*

Civil Engineering and Engineering Mechanics, Columbia University, New York, NY

Graduated: May 2010

Advisor: Nicola Chiara, Assistant Professor, Department of Civil Engineering and Engineering Mechanics, Columbia University

Feng Dong

Thesis Topic: *Essays in Advanced Risk Management and Quantitative Strategies in Infrastructure Finance*

Civil Engineering and Engineering Mechanics, Columbia University, New York, NY

Graduated: May 2010

Advisor: Nicola Chiara, Assistant Professor, Department of Civil Engineering and Engineering Mechanics, Columbia University

Current Position: Head of Capital Market Department at China Industrial Bank Hong Kong Branch, Hong Kong, China

Nakhon Kokkaew

Thesis Topic: *Risk Flexibility Theory (RFT) in Infrastructure Project Finance*

Civil Engineering and Engineering Mechanics, Columbia University, New York, NY

Graduated: May 2010

Advisor: Nicola Chiara, Assistant Professor, Department of Civil Engineering and Engineering Mechanics, Columbia University

Current Position: Associate Professor at Chulalongkorn University, Thailand

Masters' Thesis – Committee Member**Abbas Rashidi**

Thesis Topic: *Evaluating the Performance of Machine Learning Techniques for Recognizing Construction Materials in Digital Images and Videos*

School of Electrical and Computer Engineering, Georgia Institute of Technology

Graduated: August 2013

Current Position: Assistant Professor, Department of Civil & Environmental Engineering, University of Utah, Salt Lake City, UT

Laurie Swift

Thesis Topic: *A Conceptual Framework for the Assessment of Workplace Impact on Productivity*

School of Building Construction, Georgia Institute of Technology

Graduated: December 2011

Current Position: VP Global Facilities at Verint, Atlanta, GA

Geetanjali Ningappa

Thesis Topic: *Use of Lean and Building Information Modeling (BIM) in the Construction Process; Does BIM Make It Leaner?*

School of Building Construction, Georgia Institute of Technology

Graduated: May 2011

Current Position: Project Manager at Wise Construction Corporation, Winchester, MA

Benjamin David Lee

Thesis Topic: *An Investigation of Prescribed Risk Management Practices in Engineering Design*

G. W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology

Graduated: May 2010

Current Position: Research Scientist, Siemens Corporate Technology, Munich, Germany

Riyue Xiong

Thesis Topic: *Leadership in Project Management*

School of Building Construction, Georgia Institute of Technology

Graduated: December 2008

B5. Mentorship of Postdoctoral Fellows or Visiting Scholars

Minsoo Baek, Ph.D.

Research Scientist I

September 2018–July 2019

Research Project: “Construction Cost Analytics” and “Organizational Management of Transportation Agencies”

Current Position: Assistant Professor, Department of Construction Management, Kennesaw State University, Kennesaw, GA

Limao Zhang, Ph.D.

Research Scientist I

September 2016–December 2017

Research Project: “Risk Management for Highway Project Delivery,” “BIM Log Mining,” and “Valuation of Energy Efficiency Certification”

Current Position: Assistant Professor, School of Civil and Environmental Engineering, Nanyang Technological University (NTU), Singapore

Mehdi Tavakolan, Ph.D.

Research Scientist I

March 2013–September 2013

Research Project: “Streamlining Project Delivery through Risk Analysis”

Current Position: Associate Professor, School of Civil Engineering, University of Tehran, Iran

Du Yon Kim, Ph.D.

Research Topic: *Investment Valuation of International Construction Market Entry*

Visiting Post-doc from the School of Civil & Environmental Engineering, Yonsei University, Korea

Summer 2009–Fall 2010

Current Position: Associate Professor, School of Construction Engineering, Kyungil University, Gyeongson, Korea

Pengcheng Xiang, Ph.D.

Research Topic: *A Game Theory Approach to Construction Contract Design*

Summer 2009–Summer 2010

Current Position: Professor and Assistant to the Dean of School of Construction Management and Real Estate, Chongqing University, China

Yuan Chen

Research Topic: *Performance Assessment of Healthcare Facilities in Multi-inputs, Multi-outputs Environment: A Data Envelopment Approach*

Visiting Scholar from College of Construction Management and Real Estate, Chongqing University, China

Fall 2009–Fall 2010

Current Position: Assistant Professor, School of Construction Management and Real Estate, Chongqing University, China

C. Educational Innovations and Other Contributions

New Courses Developed

BCP 6900 – Economic Analysis, Risk Management, Risk Financing, & Insurance for Safety Professionals

Developed in collaboration with Dr. Castro as one of the core courses for the new Professional Masters in Occupational Safety and Health Management (PMOSH).

Principles and methodology of economic analysis concepts and risk management techniques applied to occupational health & safety.

First taught in Spring 2019.

CEE 4803-A – Infrastructure Finance

Developed in collaboration with Michael Messner as one of the core courses for the Minor in Global Engineering Leadership Development.

Introductory course in infrastructure finance. Covers methods, models, and best practices for effective infrastructure finance. Addresses the revenue, capital flow, funding and financing of infrastructure. Discusses the government's decision-making process for involving private investment and the investor opportunities in infrastructure.

First taught in Spring 2020.

CEE 4150 – Construction Management & Megaprojects

Developed as one of the core courses for the Minor in Global Engineering Leadership Development (Additional support was provided through a Public Service Pathway Award from the Center for Serve-Learn-Sustain [SLS]).

Introductory course in managing megaprojects. Covers methods, models, and best practices for efficient delivery of megaprojects. Addresses social, environmental, and economic impacts of megaprojects. Discusses cultural differences and ethical issues in the development of megaprojects.

First taught in Spring 2016.

BC 8803 – BA/BC 4803 – BA – Productivity Analysis for Solar Contractors

Developed through a partnership with the Georgia Tech Research Institute (GTRI) sponsored by a grant from the Department of Energy's (DOE's) SunShot Initiative.

Fundamentals of solar photovoltaic (PV) systems, residential and commercial installation of solar PV systems, and applications of building construction methods, such as productivity analysis, cost management and lean construction, to improve productivity of solar PV installation.

First co-taught in Spring 2013 in collaboration with Joseph Goodman and Matthew Wren (GTRI), Daniel Castro (Chair of School of Building Construction), and Mohsen Shahandashti (Ph.D. Student in the School of Building Construction).

BC6550 – Design & Construction Processes

An overview of emerging design and construction project delivery systems, project planning, procurement methods, and contracting formats. Conceptual cost estimating, design management, and quality assurance/quality control (QA/QC) for the integrated project delivery environment.

First taught in Fall 2010.

BC 8823 – BA – Advanced Cost and Financial Management in AEC

Valuation of Flexibilities On/In Systems: A Real Options Approach

A new approach to life cycle cost analysis and risk management for Architecture/Engineering/Construction (A/E/C) Integration. Focus on the theory of Real Options Analysis as an improved approach over Net Present Value (NPV) for pricing Flexibility embedded in planning, design, construction, or operations phase of a built environment asset.

First taught in Fall 2009.

BC 7100 – Quantitative Methods for Construction Research

Developed as a core research methods course required for all thesis option M.S. and Ph.D. students in Building Construction.

Philosophy, theory, methodology, and professional practices of Decision Analysis and Quantitative Risk Assessment related to the built environment assets. Focus on Influence Diagrams, Decision Tree Analysis, Value of Information, Probability, Statistics, and Monte Carlo Simulation, and Risk Management.

First taught in Fall 2008.

Continuing Education

Best Practices for Environmental Analysis & Permitting in Transportation Design–Build Projects

Design-Build Institute of America (DBIA) training webinar for best practices in managing complex environmental planning and permitting issues in different phases of a transportation project lifecycle, from planning, pre-procurement, procurement, contracting, to post-award.

Taught on June 27, 2018, with David Hannon, Chief Operating Officer – I-77 Mobility Partners – Cintra US.

Construction Data Analytics

Half-day workshop for Digital Building Lab (DBL) industry members to show how to apply advanced data analytics algorithms for solving descriptive, diagnostics, predictive, and prescriptive analytics problems in the architecture/engineering/construction (AEC) industry.

Taught on May 3, 2018, at the Georgia Tech Caddell Flex Space.

Comprehensive Risk Assessment for Transportation (CRAFT®)

Training workshop on how to use CRAFT® for risk identification, analysis, and mitigation in transportation projects.

Taught on January 27, 2016, at the Georgia Department of Transportation.

Note: A survey was conducted at the end of the workshop. Almost every respondent (strongly) agreed that “considering everything, the workshop was a good experience.”

Cortication Workshops and Training Courses in Design–Build and Integrated Project Delivery

Since August 2013, Dr. Ashuri has taught several training courses for the Design-Build Institute of America (DBIA) to enhance high-performance contracting in the design and construction industry. Courses cover topics, such as Fundamentals of Project Delivery, Principles of Design–Build Project Delivery, Design Management, Conceptual Estimation, and Post-Award Design–Build.

Next-Generation Design–Build for Transportation

Training workshop on best practices of design–build project delivery system for development of highway projects.

Taught on September 24, 2012, at the Georgia Department of Transportation.

Note: A survey was conducted at the end of the workshop. Almost every respondent (strongly) agreed that “considering everything, the workshop was a good experience.”

Participation in Interdisciplinary Teaching Activities

Asset Valuation and Public–Private Partnerships

Two infrastructure management course modules developed for the curriculum of the Graduate/Ph.D. Asset Management Boot Camp.

Developed jointly with Susan L. Tighe, Professor and Canada Research Chair in Sustainable Pavement and Infrastructure Management at the Department of Civil and Environmental Engineering in University of Waterloo, Ontario, Canada.

Offered in the University of Delaware and Georgia Tech in June 2010 and 2012, respectively.

Participation in Professional Development

- Participated in a Panel on “How GELM Faculty Members Have Adapted the Program during COVID.” Global Engineering Leadership Minor (GELM) Webinar, November 20, 2020
- Completed “ACCE Advanced Visiting Team Training” Workshop, American Council for Construction Education (ACCE), July 21, 2020
- Completed “Initial Visiting Team Member Training” and “Visiting Team Case Studies” Workshops, American Council for Construction Education (ACCE), July 20, 2020
- Completed “Initial Visiting Team Member Training” Workshop, American Council for Construction Education (ACCE), July 20, 2020
- Completed “Visiting Team Chair Training” Workshop, American Council for Construction Education (ACCE), July 17, 2020
- Participated in the 7th Annual Public-Private Partnership (P3) Town-Gown Roundtable “2020 and Beyond: Shaping the Future and Strengthening Infrastructure.”, January 14, 2020
- Completed “Progressive Design–Build Done Right” Workshop, Design-Build Institute of America (DBIA), Las Vegas, NV, November 5, 2019
- Completed the Implicit Bias Workshops, Office of Institute Diversity – Georgia Tech, September 19, 2017
- Participated in the introductory meeting with Senior Advisor to the Regional Administrator, Environmental Protection Agency (EPA) Region 4 and Colleges/Underserved Community Partnership Program (CUPP) Program Manager in the Spellman College, and facilitated connection to the School of Civil & Environmental Engineering and School of Architecture for exploring opportunities in sponsoring senior design and studio projects in partnership with communities around the U.S., and especially in Metro Atlanta and the Southeast, on technical projects that have direct impact on underserved and economically-disadvantaged communities, June 15, 2016
- Invited to participate in the College of Design Research Team visit to the Oak Ridge National Lab, May 19–20, 2016
- Selected to participate in the North Avenue Smart Corridor Visioning Workshop, Invited by Faye DiMassimo, Renew Atlanta General Manager, City of Atlanta, March 30, 2016

- Participated as a member of the team from the Georgia Tech School of Civil and Environmental Engineering (CEE) in a meeting with the Tianjin University (TJU) Delegation to discuss research and educational collaboration opportunities, February 26, 2016
- Selected to participate in the AASHE's "Sustainability across the Curriculum" Leadership Workshop at Emory University in Atlanta, Association for the Advancement of Sustainability in Higher Education (workshop tuition was paid through a Faculty Staff Development Opportunity grant made by the Center for Serve-Learn-Sustain [CSLS]), January 7–8, 2016
- Invited to meet with Head of Science and Innovation | British Consulate-General, Atlanta, and Corporate Director – Commercial, Local Partnerships | Local Government, UK, to discuss similarities and differences between the UK and the U.S. public–private partnership (P3) Infrastructure projects, October 20, 2015
- Attended the Institute for People & Technology (IPaT's) annual retreat to present and discuss major research priorities related to Smart Cities and Wise Communities, June 2, 2015
- Completed the ABET (Accreditation Board for Engineering and Technology) program accreditation workshop at the CMAA (Construction Management Association of America) Capital Projects Symposium, Long Beach, CA, April 12, 2015
- Attended the School of Civil and Environmental Engineering Cross-Cutting Research Retreat (Organized by Dr. Adjo Amekudzi-Kennedy), Georgia Tech Global Learning Center, November 14, 2014
- Completed the Leadership Training Workshop "Enhancing Meaningful Creative Challenges: EMC²" Retreat at Chateau Elan, Braselton, GA, October 17–19, 2014
- Led efforts to establish a Memorandum of Understanding (MOU) between the University of Napoli Federico II, Naples, Italy, and Georgia Tech, Summer 2014
- Completed "Identifying, Pricing, Mitigating, Managing, and Retiring Transportation Program and Project Risks at State DOTs" Training Workshop, AASHTO and FHWA Peer Exchange Group Risk Conference, Atlanta, GA, March 4, 2014
- Attended the Strategic Highway Research Program (SHRP2) Managing Risk in Rapid Renewal Projects (R09) Implementation Assistance Webinar, July 26, 2013
- Completed the American Council for Construction Education (ACCE) accreditation workshop, AACE Annual meeting, Baton Rouge, LA, February 2013
- Certified reviewer for accreditation of construction management and building construction program, American Council for Construction Education (ACCE), February 2013
- Completed "Successes in Accelerating Project Delivery" Workshop, Transportation Research Board (TRB), 92nd Annual Meeting, Washington, DC, January 13, 2013
- Participated in the "Campus Colleagues" discussion group at the 2012 New Faculty Orientation, August 15, 2012
- Completed the Lean Construction Education Program, Lean Construction Institute (LCI), Denver, CO, May 2009
- Completed "Transportation Risk Management" Workshop, Transportation Research Board (TRB), 88th Annual Meeting, Washington, DC, January 11, 2009

Contributor and Reviewer of Textbooks

- Book Proposal Reviewer, *Cost Accounting and Financial Management for Construction Project Managers* by Len Holm and Yong-Woo Kim, Wiley, April 2017
- Book Proposal Reviewer, *Financial and Risk Management in International Transport, Logistics and Supply Chain Management* edited by Stephen Gong and Kevin Cullinane, Transport at Elsevier, December 2016

- Technical Reviewer, *Skills & Knowledge of Cost Engineering*, Sixth Edition. AACE International, Hastak, M. (Ed.), 2015
- Contributor to the A + CA (Architecture + Construction Alliance) *Research Initiatives* publication, Fall 2015
- Technical Reviewer, *Project Management for Construction* by David L. Geotchs, Prentice Hall, January 2014
- Technical Reviewer, *Management of Construction Projects: A Constructor's Perspective*, 2nd Edition, by J. Schaufelberger and L. Holm, Prentice Hall, 2013
- Contributor to practice problems, *Engineering Economic Analysis* by D. Newnan, T. Eschenbach, and J. Lavelle, Oxford University Press, 11th Edition, 2011
- Technical Reviewer, *Business Analytics: Data Analysis and Decision Making* by S.C. Albright, W.L. Winston, and C.J. Zappe, Cengage Learning, 2011

VI. Service

A. Professional Contributions

Positions of Leadership in the Profession

- Governor, the ASCE *Construction Institute (CI) Executive Board*, October 2018–December 2020
- Past Chair, *Construction Research Council (CRC)*, Construction Institute (CI) of the American Society of Civil Engineers (ASCE), June 2017–May 2018
- Vice Chair, *Committee on Sustainability and Environment*, ASCE Transportation & Development Institute (T&DI), ASCE, April 2014–June 2017
- Chair, *Construction Research Council (CRC)*, Construction Institute (CI) of the American Society of Civil Engineers (ASCE), June 2016–May 2017
- Chair, *The Construction Research Congress Technical Session Subcommittee*, Construction Industry Institute (CII) Academic Committee, August 2015–August 2016
- Vice Chair, *Construction Research Council (CRC)*, Construction Institute (CI) of the American Society of Civil Engineers (ASCE), June 2015–May 2016
- Vice Chair, *The Construction Research Congress Technical Session Subcommittee*, Construction Industry Institute (CII) Academic Committee, May 2014–July 2015
- Secretary, *Construction Research Council (CRC)*, Construction Institute (CI) of the American Society of Civil Engineers (ASCE), May 2014–May 2015
- Academic Administrator, *Construction Industry Institute (CII) Risk Management Community of Practice (RMCOP)*, 2012–2015

Professional Committee Memberships and Duties

- Member-in-Training, *American Council for Construction Education (ACCE) Visiting Team for Reaccreditation of Construction Management Bachelor's Degree Program*, University of Houston, March 21-23, 2021
- Member, Review Team for "Strategies to Renew Federal Facilities." Federal Facilities Council, Board on Infrastructure and the Constructed Environment, Division on Engineering and Physical Sciences, A Consensus Study Report of The *National Academies of Science, Engineering, and Medicine*, January 2021
- Member, *The ASCE Construction Engineering Education Committee*, January 2019–Present
- Member, *Cost Risk Estimating Management (CREM) Community of Practice*, January 2020–Present

- Member, The *Stakeholder Advisory Group*, invited by the Federal Highway Administration (FHWA) to serve as a subject matter expert for “Alternative Contracting Methods Tools” research project, September 2018–December 2019
- Member, The *Subcommittee AFH20-1 Quality Management for Alternative Project Delivery*, The Transportation Research Board (TRB) of the National Academies, January 2017–Present
- Member, The *Stakeholder Advisory Group*, invited by the Federal Highway Administration (FHWA) to serve as a subject matter expert for “Information Source for Major Highway Projects” research project, September 2018–December 2019
- Member, The Design-Build Institute of America (DBIA) *Transportation and Aviation Markets Committee*, August 2014–Present
- Member, ACEC – GPTQ (American Council of Engineering Companies – Georgia Partnership for Transportation Quality) *Innovative Delivery Task Force*, August 2019–Present
- Member, The *Research Subcommittee*, ABE10 Revenue and Finance, The Transportation Research Board (TRB) of the National Academies, June 2017–Present
- Member, the Design-Build Institute of America (DBIA) *Public-Private Partnership (P3) Committee*, November 2016–Present
- Member, the Design-Build Institute of America (DBIA) *Owner Consultants/Advisors Committee*, January 2019–Present
- Member, Infrastructure Stakeholder Committee (ISC), City Council, Atlanta, GA, June 2017–December 2017
- Member, *Infrastructure Systems Committee (ISC)*, Transportation & Development Institute (T&DI), ASCE, January 2009–December 2017
- Member, The *2016 ASCE Construction Institute (CI) Leadership Forum*, American Society of Civil Engineers (ASCE), Reston, VA, September 17–18, 2016
- Member, Renew Atlanta Infrastructure Bond Technical Advisory Committee, City Council, Atlanta, GA, July 2015–May 2017
- Member, The *Educational Board*, The Advancement of Cost Engineering (ACE) International, March 2014–June 2016
- Member, *Scholarship Review Committee*, The Advancement of Cost Engineering (ACE) International, March 2014–June 2016
- Member, Engineering: Civil Discipline *Peer Review Committee* for the 2016–17 Peer Review Cycle, Fulbright Scholar Exchanges, Council for International Exchange of Scholars (CIES), Fall 2015
- Member, *2012 ASCE Industry Leaders Council (ILC)* for the development of an Infrastructure Business and Financial Model Toolkit, American Society of Civil Engineers (ASCE)
- Technical Committee Member, The *Taskforce for Developing Construction Phase Sustainability Metrics*, Construction Industry Institute Sustainability Community of Practice (CII COP), 2012
- Expert Task Group (ETG) Member, The *National Cooperative Highway Research Program (NCHRP) 15-46 “Design-Management Guide for Design-Build and Construction Manager/General Contractor Projects,”* The Transportation Research Board (TRB) of the National Academies
- Member, *ASTM E06.81 UNIFORMAT II Task Group*, WK35212 New Standard Highway Transportation Elements and Related Sitework, Building Economics Subcommittee, American Society for Testing and Materials (ASTM) International
- Expert Task Group (ETG) Member, *Strategic Highway Research Program (SHRP 2) Project C12 “Effect of Public-Private Partnerships and Non-Traditional Procurement Processes on Highway Planning, Environmental Review, and Collaborative Decision Making”*

- Member, *Construction Industry Institute (CII) Sustainability Community of Practice (COP)*, 2012
- Member, *Construction Industry Institute (CII) Academic Committee*, 2009–2014
- Member, *SAVE International – Piedmont Chapter*, 2009–2010

Editorial Board and Technical Referee for Peer-Reviewed Journals

- Assistant Specialty Editor of Quantitative Methods, The Editorial Board of the American Society of Civil Engineers (ASCE) *Journal of Construction Engineering & Management (JCEM)*, December 2009–Present
- Member, The Design-Build Institute of America (DBIA) Editorial Advisors for the *Integration Quarterly (IQ) Magazine*, January 2017–Present
- Member, The 2012 Best Paper Committee for the ASCE *Journal of Construction Engineering & Management (JCEM)*
- Reviewer, *Applied Energy*
- Reviewer, *Canadian Journal of Civil Engineering*
- Reviewer, *Construction Management and Economics*
- Reviewer, *Computer-Aided Civil and Infrastructure Engineering*
- Reviewer, *ASCE Journal of Computing in Civil Engineering*
- Reviewer, *ASCE Journal of Legal Affairs and Dispute Resolution*
- Reviewer, *ASCE Journal of Management in Engineering*
- Reviewer, *ASCE Journal of Architectural Engineering*
- Reviewer, *ASCE Natural Hazards Review*
- Reviewer, *Engineering Project Organization Journal*
- Reviewer, *Automation in Construction*
- Reviewer, *Construction Innovation*
- Reviewer, *International Journal of Project Management*
- Reviewer, *Transportation Research A: Policy and Practice*

Conference Chairs, Session Chairs, and Planning Committees

- Conference Co-Chair, The 2019 ASCE Construction Institute (CI) Summit, Atlanta, GA, March 7–9, 2019
- Paper Session 9 Moderator, 54th Annual International Conference of the Associated Schools of Construction (ASC), Minneapolis, MN, April 18–21, 2018
- Technical Committee Member, 2018 Construction Research Congress, ASCE, New Orleans, LA, April 2–4, 2018
- Moderator of the Panel on Owner Education Open House, 2017 Design-Build Institute of America (DBIA) National Conference, November 10, 2017
- Technical Committee Member, 2017 International Workshop on Computing for Civil Engineering (IWCCCE 2017), Seattle, WA, June 25–27, 2017
- Paper Session 30 Moderator, 53rd Annual International Conference of the Associated Schools of Construction (ASC), Seattle, WA, April 5–8, 2017
- Chair, Construction Research Council (CRC) Business Meeting, Vancouver, BC, Canada, June 3, 2017
- Session Chair and Award Presenter, The ASCE Peurifoy Construction Research Award Lecture by Dr. Martin Fischer, Vancouver, BC, Canada, June 3, 2017
- Session Chair and Award Presenter, The ASCE Daniel W. Halpin Award for Scholarship in Construction Lecture by Dr. Carol Menassa, Vancouver, BC, Canada, June 3, 2017

- Session Chair and Award Presenter, *The ASCE Roebling Award Lecture by Mr. Paul Giroux*, Vancouver, BC, Canada, June 2, 2017
- Session Chair, Project Delivery – Infrastructure & P3, *Construction Research Congress/Construction Specialty Conference of Canadian Society of Civil Engineers (CSCE)*, Vancouver, BC, Canada, May 31–June 3, 2017
- Session Chair, Project Delivery – Procurement, *Construction Research Congress/Construction Specialty Conference of Canadian Society of Civil Engineers (CSCE)*, Vancouver, BC, Canada, May 31–June 3, 2017
- Conference Program Committee Member, *International Conference on Sustainable Infrastructure 2016*, A Sustainable Future for China, the Asian Region and the Globe, Beijing, P.R. China, October 17–19, 2016
- Moderator, Food-Energy-Water (FEW) Nexus and Social Sustainability Roundtable, *Integrated Network for Social Sustainability/Georgia Tech (INSS/GT) Satellite Conference, Paths to Social Sustainability: Building a Research, Teaching, and Action Agenda for the Southeast*, June 8–10, 2016
- Member, Planning Committee, *Integrated Network for Social Sustainability/Georgia Tech (INSS/GT) Satellite Conference, Paths to Social Sustainability: Building a Research, Teaching, and Action Agenda for the Southeast*, June 8–10, 2016
- Session Chair, Organizational Issues, Productivity and Workforce Issues, *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016
- Technical Committee Member, *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016
- Track Chair, Construction Planning, Controls, and Methods, and Committee Leadership of Construction Track, *International Conference on Sustainable Design, Engineering, and Construction (ICSDEC 2016)*, Tempe, AZ, May 19–20, 2016
- Member, Planning Committee, *The University of Georgia/Georgia Tech (UGA/GT) Summit on Food, Energy, and Water Systems (FEWS) Research*, December 15, 2015
- Member, Planning Committee, *The Food, Energy, Water, and Transportation Systems in Atlanta Expert Workshop (Special Focus: Urban Agriculture)*, Funded by the National Science Foundation INFEWS (Innovations at the Nexus of Food, Energy, and Water Systems), December 8, 2015
- Session Chair, CII (Construction Industry Institute) Sponsored Research Track, *The 5th International/11th Construction Specialty Conference (ICSC15)*, University of British Columbia, Vancouver, Canada, June 9, 2015
- International Scientific Committee Member, *International Conference on Public–Private Partnership (ICPPP 2015)*, Austin, TX, May 2015
- Member, The Organizing Sub-committee to Showcase Ph.D. Research, *FIATECH 2015*, Boca Raton, FL, April 13–15, 2015
- Moderator, Discussion Panel to Identify Best Practices – Environmental; Design–Build Done Right for the Transportation Sector. *2015 Design–Build in Transportation Conference*, San Antonio, TX, March 10, 2015
- Member, Panel at the *North America–East Asia Workshop on Big Data Analytics for Infrastructure and Building Sustainability and Resilience Research (IBSR)*, Sponsored by the National Science Foundation, Arizona State University, and Tsinghua University, Beijing, China, September 19, 2014 (Travel expenses were paid through a grant from the National Science Foundation [NSF])

- Member, Scientific Committee, *2nd Transportation and Development Institute (T&DI) Congress*, American Society of Civil Engineers (ASCE), Orlando, FL, June 8–11, 2014
- Technical Committee Co-Chair, *The 2014 Construction Research Congress “Construction in a Global Network,”* Atlanta, GA, May 19–21, 2014
- Chair, Best Paper Selection Committee, *The 2014 Construction Research Congress “Construction in a Global Network,”* Atlanta, GA, May 19–21, 2014
- Member, Track Program Committee (TPC), “Manufacturing Applications” Track, *The 2013 Winter Simulation Conference (WSC)*, Washington, DC, December 8–11, 2013
- Member, Scientific Committee, *The 2013 Architectural Engineering Institute (AEI) Conference*, The Pennsylvania State University, April 3–5, 2013
- Member, Technical Committee, *The 2012 International Conference on Construction and Real Estate Management (2012 ICCREM)*, Kansas City, October 1–2, 2012
- Chair, Quantitative Methods Track, *The 2012 Construction Research Congress*, The Construction Institute (CI) of the American Society of Civil Engineers (ASCE) and Purdue University, West Lafayette, IN, May 2012
- Member, Technical Committee, *9th Asia Pacific Transportation Development Conference and the 25th ICTPA Annual Conference*, Challenges and Recent Advancements in Sustainable Transportation System – Planning, Design, Build, Management, and Maintenance, Sponsored by T.Y. Lin International (China) Co., Ltd, Chongqing Jiaotong University, and Chongqing University, Chongqing, China, May 25–28, 2012.
- Chair, Project Finance Track, *2011 Engineering Project Organizations Conference (EPOC)* sponsored by The Engineering Project Organization Society (EPOS), Estes Park (Denver), CO, August 9–11, 2011
- Member, Technical Committee, *The 2011 ASCE Workshop of Computing in Civil Engineering*, University of Florida and Florida International University, Miami Beach Resort, Miami, FL, June 19–22, 2011
- Chair, Project Controls and Workforce Management Session, *FIATECH 2011 Technology Conference & Showcase*, Phoenix, AZ, April 18–20, 2011
- Chair, Graduate Research Session, *The 47th Annual Associated Schools of Construction (ASC) International Conference*, Omaha, NE, April 6–9, 2011
- Co-Chair, Global Project Risk Analysis, Decision and Policy Track in *the ASCE Vulnerability, Uncertainty, and Risk: Analysis, Modeling, and Management*, Sponsored by the Council on Disaster Risk Management (CDRM) of ASCE, the First International Symposium on Uncertainty Modeling and Analysis and Management (ICVRAM 2011) and the Fifth International Symposium on Uncertainty Modeling and Analysis (ISUMA), Hyattsville, MD, April 11–13, 2011
- Member, Expert Panel, *Green Building 2011 – Outlook and Business Strategy Annual Southface Greenprints Conference*, the Sheraton Atlanta Hotel, March 15, 2011
- Chair, Project Finance Track, *2010 Engineering Project Organizations Conference (EPOC)* sponsored by The Engineering Project Organization Society (EPOS), November 4–6, 2010
- Member, Expert Panel, “Controlling Events that Impact Project Profitability: Financing–Insurance Strategies–Relationship with the Architect/Engineers–Project Monitoring and Oversight,” *14th Annual Construction Industry Conference (2010) of The Associated Owners & Developers (AOD)*, September 21, 2010
- Chair, Project Planning and Control Track, *2010 Construction Research Congress* sponsored by The Construction Institute of the American Society of Civil Engineers (ASCE) and The University of Alberta in Canada, May 8–10, 2010.

- Chair, Session on “Innovative Valuation Approaches of Flexible Options in/on AEC Systems,” The 6th *International Conference on Innovation in Architecture, Engineering and Construction (AEC)* organized by The Architectural Engineering Department of The Pennsylvania State University in collaboration with the Centre for Innovative and Collaborative Engineering at Loughborough University, UK, June 9–11, 2010
- Member, Technical Panel “Developing a Research Agenda for Transportation Infrastructure Preservation and Renewal,” The Technical Workshop Organized by The Transportation Research Board (TRB) of the National Academies and The Research and Innovative Technology Administration of The U.S. Department of Transportation, November 12–13, 2009

Technical Reviewer for Peer-Reviewed Conferences and Panels

- Member, 25+ Proposal Review Panels, *National Science Foundation (NSF)*, 2009–Present
- Reviewer, The *ASCE International Conference on Transportation & Development (ICTD 2021)*, Austin, TX, June 6-9, 2021
- Reviewer, The *ASCE International Conference on Transportation & Development (ICTD 2018)*, Pittsburgh, PA, July 15–18, 2018
- Reviewer, The 54th *Annual Associated Schools of Construction (ASC) International Conference*, Minneapolis, MN, April 18–21, 2018
- Reviewer, The 9th *International Structural Engineering and Construction (ISEC) Conference*, Valencia, Spain, July 24–29, 2017
- Reviewer, *Construction Research Congress/Construction Specialty Conference of Canadian Society of Civil Engineers (CSCE)*, Vancouver, BC, Canada, May 31–June 3, 2017
- Reviewer, The 53rd *Annual Associated Schools of Construction (ASC) International Conference*, University of Washington and Washington State University, Seattle, WA, April 5–8, 2017
- Reviewer, *2016 Construction Research Congress*, ASCE, San Juan, Puerto Rico, May 31–June 2, 2016.
- Reviewer, The 52nd *Annual Associated Schools of Construction (ASC) International Conference*, Brigham Young University (BYU) in Provo, UT, April 13–16, 2016
- Reviewer, The 51st *Annual Associated Schools of Construction (ASC) International Conference*, Texas A&M University, College Station, TX, April 22–25, 2015
- Reviewer, *2014 Construction Research Congress*, ASCE, Atlanta, GA, May 19–21, 2014.
- Reviewer, The 50th *Annual Associated Schools of Construction (ASC) International Conference*, Washington, DC, March 26–28, 2014
- Reviewer, The 49th *Annual Associated Schools of Construction (ASC) International Conference*, California Polytechnic State University (Cal Poly) in San Luis Obispo, CA, April 10–13, 2013; Omaha, NE, April 6–9, 2013
- Reviewer, *2012 Construction Research Congress*, ASCE, Purdue University, West Lafayette, IN, May 21–23, 2012
- Reviewer, *20th Annual Conference of the International Group for Lean Construction (IGLC20)*, San Diego, CA, July 18–20, 2012
- Reviewer, The 48th *Annual Associated Schools of Construction (ASC) International Conference*, Birmingham City University, Birmingham, UK, April 11–14, 2012
- Reviewer, The 47th *Annual Associated Schools of Construction (ASC) International Conference*, University of Nebraska–Lincoln, Omaha, NE, April 6–9, 2011
- Reviewer, *2010 Construction Research Congress*, ASCE, Banff, Alberta, Canada, May 8–10, 2010
- Reviewer, The 46th *Annual Associated Schools of Construction (ASC) International Conference*, Wentworth Institute of Technology, Boston, MA, April 7–10, 2010

- Reviewer, *Fifth International Conference on Construction in the 21st Century (CITC-V), "Collaboration and Integration in Engineering, Management and Technology,"* May 20–22, 2009, Istanbul, Turkey
- Reviewer, *2009 Construction Research Congress*, ASCE, Seattle, WA, April 5–7, 2009

B. Public and Community Service

2012 Siemens Competition – High School Workshop

Dr. Ashuri and his Ph.D. student, Mohsen Shahandashti, participated in the 2012 Siemens Competition – High School Workshop at Georgia Tech on November 16, 2012, and presented their research “Evaluation of Investments in Photovoltaic Systems” to high school students and their teachers.

Construction Education Foundation of Georgia (CEFGA)

Dr. Ashuri presented his research to K–12 program students in the 2009 CEFGA Expo and SkillsUSA at the Georgia International Convention Center (GICC), April 16–17, 2009.

The ACE Mentor Program of Atlanta

From 2009–2011, Dr. Ashuri worked as a mentor with the ACE Mentor Program of Atlanta to introduce high school students to possible careers in Architecture, Construction, and Engineering. Students come from predominantly minority and underserved high schools and neighborhoods and have not been exposed to opportunities in these industries.

C. Institute Contributions

Institute

- Member, *Georgia Intern Fellowships for Teachers (GIFT) Advisory Board*, Center for Education Integrating Science, Mathematics and Computing (CEISMC), August 2018–Present
- Member, *Brook Byers Institute for Sustainable Systems (BBISS) Faculty Advisory Board*, June 2015–Present
- Member, *Faculty Review Committee for Brook Byers Professorship and Brook Byers Institute for Sustainable Systems Fellows*, January–February 2018
- Faculty and Staff Trainer, *The Center for Serve-Learn-Sustain (CSLS)*, Georgia Tech’s Serve-Learn-Sustain Quality Enhancement Plan, November 2015–August 2016
- Presenter, *The Center for Serve-Learn-Sustain (CSLS) “Course Enhancement Program & Design Studio”* to the College of Design, Spring 2016
- Reviewer, *GT-FIRE (Fund for Innovation in Research and Education)*, Office of the Executive Vice President for Research, March 2015
- Member, *Graduate Petition Subcommittee*, Institute Graduate Curriculum Committee (IGCC), August 2015–July 2016
- Member, *Institute Graduate Curriculum Committee (IGCC)*, August 2013–August 2016
- Member, *The Institute Massive Open Online Course (MOOC) Peer Review Committee*, Fall 2013

College

- Member, *Reappointment, Promotion, and Tenure Committee (RP&T)*, College of Design, September 2018–May 2019
- Member, *Curriculum Committee (RP&T)*, College of Design, August 2019–August 2020

- Chair, *Reappointment, Promotion, and Tenure Committee (RP&T)*, College of Design, September 2018–May 2019
- Member, *Reappointment, Promotion, and Tenure Committee (RP&T)*, College of Design, August 2017–May 2019
- Member, *College of Design Curriculum Committee*, August 2013–July 2017
- Member, Increasing Research Impact Committee, *College of Architecture Strategic Planning Initiative*, Fall 2013
- Member, *College of Architecture Dean Search Committee*, August 2012–May 2013
- Member, *The College of Architecture Research Council*, September 2011–August 2016
- Member, *The College of Architecture Advisory Committee*, September 2010–August 2013
- Member, *The Healthcare and Healthy Environments Task Force*, College of Architecture, August 2008–August 2009
- Member, *The Architecture/Engineering/Construction Integration Task Force*, College of Architecture, August 2008–August 2009

School

- Member, School of Civil and Environmental Engineering Committee for International Initiatives (CEE CI2), August 2019–Present
- Member, Faculty Advisory Board for *Global Engineering Leadership (GEL) Minor*, August 2015–Present
- Member, *Faculty Search Committee*, School of Civil & Environmental Engineering (CEE), August 2015–July 2017
- Faculty Advisor, *Associated Schools of Construction (ASC) Graduate Student Competition*, Risk and Finance Track, Fall 2018
- Member, *Strategic Planning Steering Committee*, School of Building Construction, Spring 2015
- Member, *School of Architecture Chair Search Committee*, August 2014–April 2015
- Member, *3rd-Year Critical Review Area Committee*, School of Building Construction, Fall 2014
- Member, *Construction Engineering Area Committee*, School of Civil & Environmental Engineering, Summer 2014
- Member, *School of Building Construction Faculty Search Committee*, August 2011–May 2014
- Chair, *Integrated Project Delivery Systems M.S. Track*, August 2010–August 2017
- Coordinator, *Building Construction Ph.D. Program*, August 2012–May 2013
- Presenter, *The School of Building Construction Bid to Host the 2013 Associated Schools of Construction (ASC) International Conference*, Omaha, NE, April 10, 2011
- Faculty Advisor, *Student Construction Association (SCA)*, 2009–2010 (The Commercial Construction Group won 2nd place in the 2009 Associated Schools of Construction [ASC] Competition in Jacksonville, FL)