

**ADEEBA ABDUL RAHEEM**  
**A.M. ASCE, ENV SP, Assoc. DBIA™, OSHA Master Training, ACUE**  
**Program Advisor, Construction Engineering & Management Program**  
**Director, Construction Safety Program**  
**Department of Civil Engineering**

## EDUCATION AND CERTIFICATION

Degree	Institution	Field	Dates
Doctor of Philosophy (Ph.D.)	M.E. Rinker Sr. School of Construction Management, University of Florida	Construction Management	2010-2014
Master of Science (MS)	Engineering School of Sustainable Infrastructure and Environment, University of Florida	Construction Engineering & Management	2012-2013
Certificate	The Center for Continuing Professional Education, Harvard School of Public Health, Boston, Massachusetts, USA	Safety in Design and Construction: A Lifecycle Approach	2012
Master of Science (MS)	Department of Environmental Engineering Sciences, University of Florida	Environmental Engineering	2011
Master of Science (MS)	M.E. Rinker Sr. School of Construction Management, University of Florida	Building Construction	2008-2010
Bachelor of Science (BS)	Architectural Engineering & Design Department, University of Engineering and Technology, Lahore, Pakistan	Architectural Engineering & Design (Honors)	2001-2005

## PROFESSIONAL EXPERIENCE

Institution	Rank	Field	Dates
<b>Full-Time Academic</b>			
University of Texas, El Paso	Assistant Professor- Tenure Track	Civil Engineering	2018-Present
University of Texas, El Paso	Clinical Assistant Professor	Civil Engineering	2014-2018
University of Engineering and Technology, Lahore, Pakistan	Lecturer	Architectural Engineering & Design	2006-2008
<b>Part-Time Academic</b>			
Center for Advanced Construction Information Modeling, University of Florida	Graduate Research Assistant	Construction Management	2012-2014
Fluor Program for Construction Safety, Rinker School of Construction Management, University of Florida	Graduate Teaching and Research Assistant	Construction Management	2010-2014

Rinker School of Construction Management, University of Florida	Graduate Lab Assistant	Construction Management	2009-2010
<b>Industry</b>			
<b>Place of Employment</b>	<b>Title</b>	<b>Full-Time/Part-time</b>	<b>Dates</b>
Abrar A. Siddiqui & Associates, Lahore, Pakistan	Junior Architectural Engineer	Part-Time	2006-2008
FINARCH Consultants, Lahore, Pakistan	Junior Architectural Engineer	Full-Time	2005-2006
UNICON Consulting Services, Lahore, Pakistan	Assistant Site Manager	Full-Time	May-August 2004

## PROFESSIONAL CREDENTIALS/LICENSURE

- 2020 Procore Certified-Engineer
- 2020 Occupational Safety and Health Master Trainer
- 2017 Assoc. DBIA™
- 2016 Occupational Safety & Health 510 training course
- 2015 Envision™ Sustainability Professional (ENV SP)
- 2010 Occupational Safety & Health- 30 hr. Training Card, USA

## PUBLICATIONS

**Peer-reviewed papers** (Journal impact factor range: 1.352- 8.05) (*Names of students are underlined*)

### ○ *Under Review*

- Makahaube, J., Chang, C. and **Raheem A. A.** (2021). “Knowledge Assessment of Project Management Processes to Improve Local Government Organizational Performance,” *Engineering Management Journal*, Taylor and Francis, Under review.
- Makahaube, J., Chang, C. and **Raheem A. A.** (2021). “Using System Dynamics Method to Measure Project Management Performance of Local Government Agencies,” *Engineering Management Journal*, Taylor and Francis, Under review.

### ○ *Accepted*

- Mendoza, G. and **Raheem, A.A.** (2021). “Using Landsat Imagery to Study Spatio-Temporal Relationship between Surface Temperature and Energy Consumption Intensity on a Public University Campus,” *2021 ASCE International Conference on Computing in Civil Engineering*, Orlando, FL, Sep. 12-14, 2021. Abstract Accepted.
- Cruz, H., **Raheem, A.A.** and Nazarian, S. (2021). “Digital Twin Technology Applications for Transportation Infrastructure – An Industry Perspective,” *2021 ASCE International Conference on Computing in Civil Engineering*, Orlando, FL, Sep. 12-14, 2021. Abstract Accepted.

- Chang, C., and Raheem, A.A. (2021). “Virtual International Innovative Program on Sustainable Engineering: Lessons learned from a Successful U.S.-Perú Collaborative Effort,” *ASCE Annual Conference and Exposition, Long Beach, California*, June 27-30, 2021. Paper Accepted.
- **Published**
  - Joanne M., Raheem A.A. (2020). “Study of Past and Future Spatiotemporal Patterns and Impact on Electricity Consumption for Sustainable Planning: A Case Study of El Paso, Texas,” *MDPI Sustainability*, 12(20), 8480; <https://doi.org/10.3390/su12208480>
  - Raheem A. A., Varela S. (2019). “Safety Culture Improvement of Small Hispanic-owned Construction Companies Using Virtual Reality Tools,” *2019 Global Transitions Conference*, Tsinghua University, Beijing, China, October 12-16, 2019
  - Raheem A. A. (2019). “Campus- Scale Energy Modeling and Analysis of University Buildings for Sustainable Planning and Development,” *2019 Global Transitions Conference*, Tsinghua University, Beijing, China, October 12-16, 2019
  - Moyer J., Raheem A.A. (2018). “Enhancing Students’ Understanding for Civil Engineering Discipline Using Cogenerative Dialogues,” *International Conference on Advances in Civil, Architecture and Environmental Engineering*, Kuala Lumpur, Malaysia, 19 - 20 July 2018
  - Moyer J., Raheem A.A. (2018). “Analysis of The Sustainability Framework, Implementation and Monitoring Methods Adopted by Various U.S. Cities,” *International Conference on Advances in Civil, Architecture and Environmental Engineering*, Kuala Lumpur, Malaysia, 19 - 20 July 2018, **Best Presentation Award**
  - Lozada L., Raheem A.A. (2018). “A Comprehensive Review of the Unmanned Air Vehicles (UAVs) Regulations in Mexico: Construction Industry Application,” *International Conference on Advances in Civil, Architecture and Environmental Engineering*, Kuala Lumpur, Malaysia, 19 - 20 July 2018
  - Juan C., Raheem A.A., and Issa R.R. (2016). “From simulation to monitoring: Analyzing the potential of mixed-mode ventilation systems through literature to integrate natural ventilation for buildings,” *Energy and Buildings*, Elsevier, 127, pp. 1008-1018, <https://doi.org/10.1016/j.enbuild.2016.06.054>
  - Jia M., Srinivasan R., and Raheem A. (2016). “From occupancy to occupant behavior: An analytical survey of data acquisition technologies, modeling methodologies, and simulation coupling mechanisms for building energy efficiency,” *Journal of Renewable and Sustainable Energy Reviews*, Elsevier, 68(1), pp. 525-540, <https://doi.org/10.1016/j.rser.2016.10.011>
  - Raheem A.A., Issa R.R.A., and Olbina S. (2016). “Environmental performance and economic analysis of different glazing-sunshade systems using simulation tools,” *ASCE Journal of Computing in Civil Engineering: Special issue (Invited paper)*, [https://doi.org/10.1061/\(ASCE\)CP.1943-5487.0000564](https://doi.org/10.1061/(ASCE)CP.1943-5487.0000564)
  - Raheem A.A., and Issa R.R.A. (2016). “Safety implementation framework for the Pakistani construction industry,” *Journal of Safety Science*, Elsevier, 82, pp.301-314, <https://doi.org/10.1016/j.ssci.2015.09.019>

- Juan C., **Raheem A.A.**, and Srinavasan R. (2016). "Comparative embodied energy analysis of various materials to build reticulated dome structures," *Buildings and Environment*, 96, pp. 22-34, <https://doi.org/10.1016/j.buildenv.2015.11.010>
  
- **Raheem A.A.**, Issa R.R.A., Olbina S. and Flood, I. (2015). "Environmental performance of different glazing-sunshade systems using simulation tools," *Proceedings of Fifth International Conference on Advanced Communications and Computation (INFOCOMP)*, Brussels, Belgium, pp.134-139, **Best Paper Award**
  
- **Raheem A. A. (2015)**. "Stakeholders Perspective Analysis for Improving Construction Safety in Pakistan," *III International Congress on Construction and Building Research*, Madrid, Spain. 14-16 December, 2015
  
- **Raheem A.A.**, Issa R.R.A., and Olbina S. (2014). "Energy and indoor comfort analysis of various window-shading assemblies in a hot and humid climate," **Invited paper** in the *Winter Simulation Conference (WSC) Savannah*, GA, December 2014, pp. 3200-321, 10.1109/WSC.2014.7020156
  
- **Raheem A.A.**, Issa R.R.A., and Olbina S. (2014). "Studying the Impacts of Different Glazing Sunshade Assemblies on Energy, Thermal Comfort and Daylighting of a South Facing Mid-Rise Office Building in Florida," *ICCCBE 2014*, Disney World, Orlando, Florida, USA, <https://doi.org/10.1061/9780784413616.073>
  
- **Raheem A.A.** and Hinze J. (2014). "Disparity between Construction Safety Standards: A Global Analysis," *Safety Science*, Elsevier, 70(1), 276-287, <https://doi.org/10.1016/j.ssci.2014.06.012>
  
- **Raheem A.A.**, Issa R.R.A., and Olbina S. (2013). "Solar Transmittance Analysis of Different Types of Sunshades in Florida," *Building Simulation journal*, Springer, 7(1), pp.3-11, <https://doi.org/10.1007/s12273-013-0137-4>
  
- **Raheem A. A.** and Hinze J. (2013). "Improving the Existing Regulatory Infrastructure for Worker Safety in the Construction Industry of Pakistan," *International Conference on Safety, Construction Engineering and Project Management (ICSCEPM 2013): Issues, Challenges, and Opportunities in Developing Countries*, Pakistan, pp. 72-77.
  
- **Raheem A. A.** and Hinze J. (2013). "Understanding the Safety Culture of Construction Companies in Pakistan by Analyzing Safety Policy Manuals," *International Conference on Safety, Construction Engineering and Project Management (ICSCEPM 2013): Issues, Challenges, and Opportunities in Developing Countries*, Pakistan, pp. 66-71
  
- **Raheem A. A.** and Hinze J. (2012). "Reasons for the Poor Implementation of Worker's Safety in the Construction Industry of Pakistan: A Contractor's Perspective," *The CIB W099 International Conference 2012. Modeling and Building Health and Safety*, Singapore, pp 54-63
  
- **Raheem A. A.**, Hinze J., and Azhar S. (2012). "Injury/fatality Data Collection Needs for Developing Countries," *Third International Conference on Construction in Developing Countries (ICCIDC-III): Advancing Civil, Architectural and Construction Engineering & Management*, July 4-6, 2012, Bangkok, Thailand. pp. 308-313.
  
- **Raheem A.A.** and Issa R.R.A. (2012). "Assessing the IECC Energy Saving Potential for Residential Construction in Florida," *ASCE International Workshop on Computing in Civil*

*Engineering*, June 17-20, 2012, Clearwater Beach, FL, USA. pp. 650-657, <https://doi.org/10.1061/9780784412343.0082>

- **Raheem A. A.**, Hinze J., Azhar S., Choudhry R., Riaz Z. (2011). “Comparative Analysis of Construction Safety in Asian Developing Countries,” *Sixth International Conference on Construction in the 21st Century (CITC-VI)* “Construction Challenges in the New Decade, July 5-7, 2011, Kuala Lumpur, Malaysia. pp. 623- 630
- **Raheem, A.A.**, Issa R.R.A., and Olbina S. (2011). “Environmental Performance Analysis of a Single-Family House using BIM,” *ASCE International Workshop on Computing in Civil Engineering*, June 19-22, 2011, Miami FL, USA. pp. 827-831, [https://doi.org/10.1061/41182\(416\)104](https://doi.org/10.1061/41182(416)104)
- **Raheem, A.A.**, Tahir, M.A. (2008). “Mughal Architecture under the Cloud of Demolition: Environmental effects on monuments,” *Journal of Building Appraisal*, Palgrave Macmillan UK. 4 (2), pp. 103-114, <https://doi.org/10.1057/jba.2008.26>

#### **Other scholarly publications**

- **Raheem, A. A.**, “Developing a framework for a Reciprocal Safety Implementation System (RSIS) in the Pakistani construction industry,” Ph.D. dissertation submitted to the Faculty of Rinker School of Construction Management, University of Florida, Gainesville FL, 2014.
- **Raheem, A. A.**, “Environmental Performance Analysis of a Single-Family House using BIM,” MS Thesis presented to the Rinker School of Construction Management. University of Florida, Gainesville FL, 2010.
- Tampa’s Hyde Park Neighborhood Community Conservation Project, Student participant, 2010, <https://historichydeparktampa.com/wp-content/uploads/2019/09/Hyde-Park-Community-Conservation-Plan-1.pdf>

#### **Poster Presentations**

- Moyer, J., & **Raheem, A.A.** (2019). “Habitat Quality Analysis Using InVEST to Understand Urbanization Impacts on the Ecosystem in El Paso, TX,” *2019 Natural Capital Symposium*, Stanford CA
- Moyer, J., & **Raheem, A.A.** (2017). “Comparative analysis of Focus Areas vs Citywide Infrastructure Sustainability Indices for El Paso, TX,” *Graduate Student Expo*, University of Texas at El Paso, TX
- Moyer, J., & **Raheem, A.A.** (2017). “Developing Infrastructure Sustainability Indices for the City of El Paso, TX,” *National Science Foundation ERC site visit*, Georgia Tech., Atlanta, GA
- Moss, R., & **Raheem, A.A.** (2017). “Study of Infrastructure Systems’ Interaction and Digital Monitoring for Sustainable Campuses,” *National Science Foundation ERC site visit*, Georgia Tech., Atlanta, GA
- Chavez, R., Ortega, N., & **Raheem, A. A.** (2016). “Energy Analysis of Cool Roofs for Residential Buildings in a Hot or Dry Climate,” *Work with a Scientist Program*, UTEP, El Paso, TX

- Burnett, K., Herrera, A., & Raheem, A. A. (2016). “Daylighting Analysis of a School Building Using Simulation Technology,” *Work with a Scientist Program*, UTEP, El Paso, TX.
- Estrella, A., Perez, E., Raheem, A. A., & Willis, S. (2016). “Comparative Study of Dynamic vs Static Shading Devices for an Office Building in Hot and Dry Climate,” *Work with a Scientist Program*, UTEP, El Paso, TX.

**Research presentations by the student mentees at various international universities (under the funded study abroad programs)**

- Fregoso, G., Perry, A., Esparza, A., Reyes, J., and Cortez, W. (2020). “Redesigning the Favela Waste Cart using Recycle Materials,” Presented at the Pontificia Universidade Católica do Paraná, Curitiba, Brazil.
- Olivas, A., Peña, A., Santos, L., Lunardon, L., and Auino, L. (2020). “Revitalization of Belem River in Curitiba using Algae Blooms: A Comprehensive Socio-Environmental Analysis,” Presented at the Pontificia Universidade Católica do Paraná, Curitiba, Brazil.
- Alejandra, A., Mora, S., and I, Arciniaga. (2019). “Measuring and improving Thermal Transmission in Historic Buildings Using Arduino Platform,” Presented at the University of Rosario, Rosario, Argentina.
- Vinti, L., Esparza, L., and Lopez, D. (2019). “Using Urban Waste Construction Materials for Sustainable Highway Pavements,” Presented at the University of Rosario, Rosario, Argentina.
- Arreola, J., Valenzuela, G., and Rivosecchi, M. (2019). “Modeling Urban Island Heat Effects in Rosario using Dynamic Building Simulation Platform,” Presented at the University of Rosario, Rosario, Argentina.
- Esper, C., Arias, S., Mendoza, J. (2019). “Using Recycled Plastic to Produce Bricks for Building Construction, Presented at the University of Rosario,” Rosario, Argentina.
- Vinzia, M., Ramos, v., and Ibanez, G. (2019). “Urban Mobility and sustainable Transportation solutions Using TSIS 6 Platform,” Presented at the University of Rosario, Rosario, Argentina.

**Reports submitted**

- Final report to the U.S. Department of State, “Multidisciplinary Global Skills to Prepare Engineering Students for Leading Sustainable Infrastructure Solutions,” March 2021.
- Final report to the U.S. Department of Labor, “Trench Hazards Prevention for non – English speaking and vulnerable construction workers in the greater El Paso, Texas and surrounding areas,” December 2020.
- Annual report to VentureWell, “Green Technology Innovation and Entrepreneurship for Engineers,” October 2020

- Final report to the U.S. Department of State, “Multidisciplinary Global Skills to Prepare Engineering Students for Leading Sustainable Infrastructure Solutions,” September 2019
- Final report to the U.S. Department of Labor, “Silica Hazards Prevention for non – English speaking and vulnerable construction workers in the greater El Paso, Texas and surrounding areas,” December 2019
- Annual report to VentureWell, “Green Technology Innovation and Entrepreneurship for Engineers,” October 2019
- Final report to the U.S. Department of Labor, “Excavation Hazards Prevention for non – English speaking and vulnerable construction workers in the greater El Paso, Texas and surrounding areas,” December 2018.
- Final report to the U.S. Department of Labor, “Confined Space Safety Prevention for non – English speaking and vulnerable construction workers in the greater El Paso, Texas and surrounding areas,” December 2017.
- Final report to the U.S. Department of Labor, “Electric Hazard Safety Prevention for non – English speaking and vulnerable construction workers in the greater El Paso, Texas and surrounding areas,” December 2016.
- Final report to the U.S. Department of Labor, “Fall Prevention Safety Prevention for non – English speaking and vulnerable construction workers in the greater El Paso, Texas and surrounding areas,” December 2015.
- Construction safety implementation planning report submitted to the Pakistan Engineering Council- Based on the US-PAK Science and Technology Program findings, August 2013.
- Annual reports to the U.S. Department of State, U.S.- Pakistan Science and Technology Program, “Establishment of a Center of Excellence to Conduct and Promote Construction Safety Research, Education and Training in Pakistan,” 2011, 2012, 2013.

#### **Keynote/Invited Speaker**

- Invited Speaker: SHPE Distinguished Lecture Series, Role of Technology to Transform Construction Safety Training and Education, 2020 SHPE National Convention.
- Invited panelist: American Council of Engineering Companies (ACEC)-TX, El Paso Chapter- Engineering Workforce Roundtable, December 16, 2020.
- Invited Speaker: International conference on wastewater technologies and environmental treatment, Kuala Lumpur, Malaysia on October 18-19, 2019, “Using Urban Building Energy Modeling to analyze micro-climate.”
- Invited Speaker: 12th international conference on multi-functional materials and applications, November 22-25, 2018, Incheon, Korea, “Leveraging Embodied Energy Analysis to select Materials for Reticulated Dome Structures.”

- Keynote Speaker: 5th International Conference on Energy, Environment and Sustainable Development 2018, November 14-16, 2018, Jamshoro PK, Rethinking Sustainability for Cities, Global Challenges for our Common Future.”

### **Invited Lectures/Presentations**

- “BIM For Transportation Infrastructure,” Southern Plains Transportation Center (SPTC) Advisory Board Annual Meeting and Leadership Retreat, August 2020.
- “Digitalization of Transportation Infrastructure: Shifting Gears Towards Adopting New Technologies,” Peru-US Study Abroad Program, April 2020.
- “Capacity Building of Small Construction Companies through Safety Training Using Virtual Reality,” Construction Management Technology, Purdue Polytechnic Institute, March 2019.
- “Safety and Technology for Construction Industry,” Rinker School of Construction Management, University of Florida, February 2019.
- “Construction Cost Estimation and Scheduling: Resources, Common Mistakes, and Challenges,” Senior Design course, Civil Engineering Department UTEP, 2018.
- “Construction Cost Estimation and Scheduling: Resources, Common Mistakes, and Challenges,” Senior Design course, Civil Engineering Department UTEP, 2017.
- “Energy-Efficient Housing in El Paso, Challenges and Opportunities, Housing Authority of the City of El Paso,” 2016.
- “Digital Infrastructure Asset Management-Life-cycle Applications,” Department of Civil Engineering, University of Texas, El Paso, November 10, 2016.
- “Construction Cost Estimation and Scheduling: Resources, Common Mistakes, and Challenges,” Senior Design course, Civil Engineering Department UTEP, 2016.
- “Sustainable University Campuses: UF case study,” invited presentation, UTEP Campus Sustainability Advisory Committee, Center for Environmental Resource Management (CERM), April 10, 2015.
- “Modeling and Simulation for Energy Efficient Buildings,” Guest Speaker, GRO Conference, US Green Building Council El Paso Chapter, November 14, 2014.
- “Digital Infrastructure Asset Management,” Department of Civil Engineering, University of Texas, El Paso, November 10, 2014.
- “Building Energy Consumption and Environment- Making sense of numbers,” Environmental Science / TIERA Program, UTEP, October 20, 2014.
- “Construction Planning and Scheduling,” Department of Civil Engineering, University of Texas, El Paso, October 6, 2014.



- “Exploring the Concept of Sustainability in Construction through the Use of Technology,” Department of Civil Engineering, University of Texas, El Paso, February 3, 2014.
- “Energy Simulation Tools,” Rinker School of Construction Management, University of Florida, February 13, 2013.
- “Building Performance Simulation Tools: Challenges and Opportunities,” Rinker School of Building Construction, University of Florida, January 7, 2012.
- “Basic model for the implementation of Construction safety: What Why Who Where When?” National University of Science and Technology, SCEE, Pakistan. December 28, 2011.
- “Fall injuries and protection,” National University of Science and Technology, SCEE, Pakistan. December 28, 2011.

## RESEARCH PROJECTS

**Total awarded: \$2,669,928 (As PI & Co-PI: \$1,645,469; As lead scientist: \$21,000; As senior personnel: \$997,159; \$6,300 as research incentive)**

### **Assistant Professor, University of Texas at El Paso, Aug 2014 – Present**

1. **Project Title: Understanding the Interactions between Transportation and other Civil Infrastructure Systems using Digital Twin Technologies**  
 Funding Agency: Center for Connected Cities with Smart Transportation (C2SMART), Federal Highway Admin-U.S. Dept of Transportation  
 Amount: \$212,637  
 Period: 1/30/2021-1/30/2022  
 Investigator(s): Jeff Weidner (PI, 40%), Adeeba A. Raheem, Kelvin Cheu (Co-PI, 30%)
2. **Project title: Residential Hazards Prevention for Non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**  
 Funding Agency: U.S. Department of Labor (FED)  
 Amount: \$160,000  
 Period: 9/30/2020-9/29/2021  
 Investigator(s): Adeeba A. Raheem (PI, 50%), Austin Marshall (Co-PI, 50%)
3. **Project title: Customer Discovery for PlastiCrete**  
 Funding Agency: National Science Foundation, Southwest I-CORPS  
 Period: Summer 2020  
 Amount: \$3,500  
 Principal Investigator: Adeeba A. Raheem (100%)
4. **Project Title: Pathways to Success in Graduate Engineering: Understanding and Supporting the Critical Transition from Undergraduate to Graduate Engineering Studies (PASSE)**  
 Funding Agency: National Science Foundation  
 Amount: \$997,159  
 Period: 12/01/2019- 11/30/2024

Investigators (s): Patricia Nava (PI), Co-PIs: Miguel Velez-Reye, Danielle Xiaodan Morale, Senior Personnel: Adeeba Raheem, Stella Quiñones, Bill Tseng, Virgilio Gonzalez

- 5. Project Title: Development of Low/zero Cost Construction Management Course Material**  
Funded by: UTEP Academic Technologies  
Period: 9/1/2019- 9/1/2020  
Amount: \$3,000  
Investigator: Adeeba Raheem (100%)
- 6. Project Title: Establishing the “Intelligent Construction Lab” To Promote BIM and VR/AR Utilization in Research and Teaching**  
Funded by: Engineering Dean’s Office at UTEP, Center for Transportation Infrastructure Systems (CTIS)  
Period: November 2019- January 2020  
Amount: \$57,000  
Investigator: Adeeba A. Raheem (PI, 100%)
- 7. Project title: Customer Discovery for the BorderCross App (developed to reduce wait time at border crossings)**  
Funding Agency: NSF Southwest I-CORPS  
Period: Summer 2019  
Amount: \$3,000  
Investigator: Adeeba A. Raheem (100%)
- 8. Project title: Trenching Hazards Prevention for Non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**  
Funding Agency: U.S. Department of Labor (FED)  
Amount: \$160,000  
Period: 9/30/2019-9/29/2020  
Investigator(s): Adeeba A. Raheem (PI, 50%), Austin Marshall (Co-PI, 50%)
- 9. Project title: U.S.- Brazil Transdisciplinary Study Abroad Program on Peace Engineering (One of the 11 selected programs nationwide)**  
Funding Agency: Partners of the Americas, U.S. Department of State, ExxonMobil, NAFSA: Association of International Educators  
Amount: \$68,295  
Period: 4/1/2019- 3/31/ 2020  
Investigator(s): Ivonne Santiago (PI, 50%), Adeeba Raheem (Co-PI, 50%)
- 10. Project title: Silica Hazards Prevention for Non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**  
Funding Agency: U.S. Department of Labor (FED)  
Amount: \$150,000  
Period: 9/30/2018-9/29/2019  
Investigator(s): Adeeba A. Raheem (PI, 50%), Austin Marshall (Co-PI, 50%)
- 11. Project title: Green Technology Innovation and Entrepreneurship for Engineers**  
Funding Agency: VentureWell  
Amount: \$25,749

Period: 7/1/2018-12/31/2021

Investigator(s): Adeeba Raheem (PI, 80%), Ivonne Santiago (Co-PI, 20%)

**12. Project title: Developing Multidisciplinary Global Skills to Prepare Engineering Students for Leading Sustainable Infrastructure Solutions (One of the 10 selected programs nationwide)**

Funding Agency: Partners of the Americas, U.S. Department of State, Chevron, NAFSA: Association of International Educators

Amount: \$60,880

Period: 8/1/2018-7/30/2019

Investigator(s): Carlos Chang (PI, 50%), Adeeba Raheem (Co-PI, 50%)

**13. Project title: Excavation and Trenching Hazard Prevention for Non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**

Funding Agency: U.S. Department of Labor (FED)

Amount: \$154,595

Period: 9/30/2017-9/29/2018

Investigator(s): Adeeba A. Raheem (PI, 50%), Austin Marshall (Co-PI, 50%)

**14. Project Title: Collaborative Research AGEP: The Hispanic Alliance for the Graduate Education and the Professoriate on Environmental Sciences and Engineering (H-AGEP)**

Funding Agency: National Science Foundation

Amount: \$1,137,520

Period: 9/30/2017-9/29/2022

Role: Faculty Mentor

**15. Project title: Confined Space Safety for non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**

Funding Agency: U.S. Department of Labor (FED)

Amount: \$139,556

Period: 9/30/2016-9/29/2017

Investigator(s): Adeeba A. Raheem (PI, 50%), Austin Marshall (Co-PI, 50%)

**16. Project title: Multispectral Cameras and Associated Accessories for Existing UAV Platform in Civil Engineering**

Funding source: UTEP College of Engineering Equipment Enhancement Fund

Amount: \$10,000

Collaborators: Saurav Kumar (PI), Co-PIs: Adeeba A. Raheem, Raed AlDouri, Jeffrey Weidner, Ivonne Santiago

**17. Project title: Transforming Students' Partnerships with Scientists through Cogenerative Dialogues**

Funding Agency: National Science Foundation (NSF)

Amount: \$1,533,423

Period: 10/1/2013- 7/30/2017

Investigator(s): PI: Pei-Ling Hsu, Lead scientists: Adeeba A. Raheem, Charlotte Vines, Jacen Moore, Juan Noveron, Wen-Yee Lee, River Xiao, Lixin Jin, Bill Tseng, Rachid Skouta, Karine Felenon

**18. Project title: Electric Hazard Safety for non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**

Funding Agency: U.S. Department of Labor (FED)

Amount: \$125,964

Period: 9/30/2015-9/30/2016

Investigator(s): Austin Marshall (PI, 50%), Adeeba A. Raheem (Co-PI, 50%)

**19. Project title: Study of Applications of Unmanned Aerial Vehicles in Civil Engineering**

Funding Agency: Office of the Vice President for Student Affairs, University of Texas, El Paso

Amount: \$7,600

Period: 8/5/2015-8/5/2016

Investigator(s): PI: Adeeba Abdul Raheem (100%)

**20. Project title: Fall Prevention Safety for non – English Speaking and Vulnerable Construction Workers in The Greater El Paso, Texas, and Surrounding Areas**

Funding Agency: U.S. Department of Labor (FED)

Amount: \$139,960

Period: 9/30/2014-9/30/2015

Investigator(s): Austin Marshall (PI, 50%), Adeeba A. Raheem (Co-PI, 50%)

**21. Establishing the Construction Management Research Program At UTEP**

Funding Agency: UTEP

Amount: ~\$162,433

Period: 8/30/2014-8/30/2016

Investigator: PI: Adeeba A. Raheem (100%)

**Graduate Research Assistant, University of Florida, 2010-2014**

**22. Project title: Establishment of a Center of Excellence to Conduct and Promote Construction Safety Research, Education, and Training in Pakistan**

Funding Agency: Department of State: National Academy of Sciences (NAS) under Pakistan-U.S. Science and Technology Cooperation Program-Phase 4

Amount: \$208,035

Period: 11/15/2010- 8/15/2014

Investigator(s) U.S. Side: PI: Jimmie Hinze, Co-PI: Salam Azhar, Lead Graduate Researcher: Adeeba Abdul Raheem

○ **Under Review**

**1. Project title: Excel-virtual reality (Excelarat) Based Risk Assessment and Threat Simulation for Safe Building Design**

Funding Agency: US Department of Homeland Security through UTSA

Amount: \$197,950

Period: 1/9/2022-8/21/2024

Investigator: Adeeba Raheem (PI)

**2. Project Title: Phase II: Digital Twin Technologies Towards Understanding the Interactions between Transportation and Other Infrastructure Systems**

Funding Agency: FHWA through the Center for Connected Cities with Smart Transportation (C2SMART) at NYU

Amount: \$210,001 (C2SMART: \$140,000; Cost share: \$70,001)

Period: 10/1/2021-9/30/2022

Investigator(s): Ruimin Ke (PI), Jeff Weidner (Co-PI), Adeeba A. Raheem (Co-PI), Kelvin Cheu (Co-PI)

**3. Project Title: EQUIP – EQUity Driven Data Analysis for Public Transportation Planning**

Funding Agency: FHWA through the Center for Transportation, Environment, and Community Health (CTECH) at Cornell University

Amount: \$121,177 (CTECH: \$80,428; Cost share: \$40,749)

Period: 10/1/21 to 9/30/22

Investigators: Adeeba Raheem (PI); Kelvin Cheu (Co-PI)

## **TEACHING ACCOMPLISHMENT**

### **New Programs Developed (Instrumental role)**

- Bachelor of Science in Construction Engineering and Management (BSCEM)  
When I joined UTEP in 2014, the plan to start Bachelor of Science in Construction Engineering and Management (BSCEM) was underway and the proposal was submitted to the Texas Higher Education Coordinating Board (THECB). I took most of the responsibility then onwards to prepare related documents and answering questions sent by the THECB. I also started preparing upper-level courses for the BSCEM program. In 2015, we officially launched the program and now we have more than 50 students enrolled in the program. Now I am leading the effort for ABET accreditation and preparing self-study report for submission before the visit.
- Master of Science in Construction Management (MSCM)  
Starting 2015, I have worked closely with the Extended University at UTEP to develop the online structure and content for our online MSCM program which is now one of the fastest growing online programs at UTEP and has been recognized at the national level as one of the top online construction management programs bringing a revenue of more than \$1.5M annually. The program is one of the fastest growing online programs at UTEP and recognized nationally among top 25 online MS programs.

### **Study Abroad Program Developed**

1. U.S.-Argentina Study Abroad Program, “*Developing Multidisciplinary Global Skills to Prepare Engineering Students for Leading Sustainable Infrastructure Solutions*,” Funding Agency: 100,000 Strong in the Americas; Funding period: September 1, 2018 – August 30, 2019. 15 students were fully supported. This program was one of the 11 selected for funding nationwide by the agency.
2. U.S.-Brazil Study Abroad Program, “*Peace Engineering*,” Funding Agency: 100,000 Strong in the Americas Funding period: April 1, 2019 – March 31, 2020. 10 students were fully supported. This program was one of the 10 selected for funding nationwide by the agency.

### **New Courses Developed**

- CE 4389: *Construction Safety*
- CE 4387: *Construction Scheduling*
- CE 3334: *Construction Management*
- CE 4382: *Construction Cost Analysis and Bidding*

- CE 4376: *Advanced Topics in Civil Engineering II (Peace Engineering)*
- CE 5381: *Sustainable Construction*

#### **Courses revised for the Online Instruction**

- CE 5388: Advanced Construction Safety
- CE5334: Advanced Construction Management
- CE 5387: Advanced Construction Scheduling
- CE 5382: Advanced Construction Cost Analysis and Bidding

#### **Funding received for Program/Teaching Improvement**

1. **Project Title: Development of Low/zero Cost Construction Management Course Material**  
 Funded by: UTEP TeachTech Research Cohort: Academic Technologies  
 Period: 9/1/2019- 9/1/2020  
 Amount: \$3,000  
 Investigator: Adeeba Raheem (100%)
  
2. **Project Title: Establishing the “Intelligent Construction Lab” To Promote BIM and VR/AR Utilization in Research and Teaching**  
 Funded by: Engineering Dean’s Office at UTEP, Center for Transportation Infrastructure Systems (CTIS)  
 Period: November 2019- January 2020  
 Amount: \$57,000  
 Investigator: Adeeba Raheem (PI, 100%)
  
3. **Project title: Green Technology Innovation and Entrepreneurship for Engineers**  
 Funding Agency: VentureWell  
 Amount: \$25,749  
 Period: 7/1/2018-12/31/2021  
 Investigator(s): Adeeba Raheem (PI, 80%), Ivonne Santiago (Co-PI, 20%)
  
4. **Project Title: Development Hands-on Experiences for Construction Management Students**  
 Funded by: UTEP TeachTech Research Cohort: Academic Technologies  
 Period: 9/1/2017- 9/1/2018  
 Amount: \$2,000  
 Investigator: Adeeba Raheem (100%)
  
5. **Project Title: STEM Accelerator Faculty Partner, Educate Texas- STEM Accelerator project**  
 Funded by: Educate Texas- STEM Accelerator  
 Period: 9/1/2017- 9/1/2018  
 Amount: \$8,500  
 Investigator: Adeeba Raheem (100%)

#### **Honors and Awards in Teaching**

Total monetary award amount received: \$41,650

- At the National Level

- 2020 Society of Hispanic Professional Engineers [STAR Educator of the Year Award](#), The STAR awards are major honors that recognize the contributions of professionals to the fields of science, technology, and engineering. The 27 recipients of the 2020 STAR awards were selected from a field of 181 nominees that include top individuals and institutions in the industry, academia, and government. SHPE is the nation's largest association dedicated to fostering Hispanic leadership in the STEM field.
- 2020 Selected as a member of the inaugural cohort for the ASEE CDEI Cultivating Inclusive Communities Program. This effort is led by the American Society for Engineering Education Commission for Diversity Equity, and Inclusion (ASEE CDEI) Professional Development Committee's Cultivation Team.
- 2020 Selected to participate in the Academic Leadership for Women Engineers (ALWE) 2020-21 Program, Society of Women Engineers, January 8- January 9, 2021.
- 2020 The Association for the Advancement of Sustainability in Higher Education's (AASHE's) Scholarship to attend the Global Conference on Sustainability in Higher Education
- 2020 NSF ASSIST award to attend the AISES 2020 Fall Engineering Faculty Career Workshop and AISES National Conference ([one of the 40 awardees selected nationwide](#))
- 2020 Invited to attend Building a Stronger Curriculum with Kiewit, Kiewit University, July 22-23, 2020 ([one of the 54 participants selected nationwide](#))
- 2020 STEM Women of Color Conclave Travel Award (\$850)
- 2020 U.S. Department of States Travel Award for the IDEAS Incubator Workshop (\$400)
- 2020 NSF ASSIST travel award for the AISES 2020 Spring Engineering Faculty Career Workshop, Temecula, California (\$1,500) ([one of the 40 awardees selected nationwide](#))
- 2020 Unity Education Grant for Software License
- 2019 NSF ASSIST travel award for the 2019 Academic Leadership for Women Engineers (ALWE) program at the WE19 Annual Conference, Anaheim CA (\$2,000) ([one of the 40 awardees selected nationwide](#))
- 2019 Awarded Certificate of Effective College Instruction by the Association of College and University Educators (ACUE), This certificate signifies my completion of a 25-module course in effective teaching practices requiring the implementation of evidence-based instructional approaches. The credential is co-issued by the American Council on Education and distinguishes faculty for their commitment to educational excellence and student success.
- 2019 Selected as one of the attendees, Building a Stronger Curriculum with Kiewit, Kiewit University, Omaha Nebraska, July 22-23, 2019 (\$2,000), ([one of the 60 participants selected nationwide](#))
- 2018 ASEE travel award (one of the ten awardees), NSF- Rethinking Engineering Education at



Hispanic Institutions Grant, (\$1,750)

- 2018 Olin Summer Institute Scholarship, Olin College of Engineering, (\$11,200) (for a team of three members)
- 2016 American Society of Civil Engineering (ASCE) [Excellence in Civil Engineering Education \(ExCEED\) Fellow](#) (\$1,850) ([one of the 40 participants selected internationally](#)). Attending ExCEED workshop is supported by a merit-based fellowship offered by ASCE to CE/CEM professors of outstanding teaching record and desire for further development.
- 2016 Design-Build Institute of America (DBIA)- Instructor Certification (\$2,000), ([One of the fifteen attendees selected nationwide](#))
- *At the Regional level*
  - 2021 [Outstanding Young Faculty Award](#), American Society for Engineering Education (ASEE)- Gulf Southwest Section (\$500)
  - 2020 American Society of Safety Professionals (ASSP) Foundation Professional Development Grant (\$1,000)
  - 2019 Recognized as one of the twenty-two faculty members from the UT earning national teaching credentials
  - 2018 Selected as one of the UT System- Association of College and University Educators (ACUE) Pilot Program Participant
  - 2017 STEM Accelerator Faculty Partner, Educate Texas- STEM Accelerator project, (\$8,500), 2017-18, STEM Accelerator is developed in alignment with priorities for education and workforce outlined by the Texas Higher Education Coordinating Board and the Texas Workforce Commission.
- *At the University level*
  - 2021 University Nominee for the UT Regents' Outstanding Teaching Award, UTEP
  - 2021 College of Engineering Nominee for the UT Regents' Outstanding Teaching Award, UTEP
  - 2021 Department Nominee for the UT Regents' Outstanding Teaching Award, Civil Engineering, UTEP
  - 2020 [Dean's Award for Excellence in Teaching](#), College of Engineering, UTEP, a college-wide award that recognizes the quality and effectiveness of course design, student relationships, learning assessment techniques, and creativity in overall teaching (\$1,000)
  - 2019 TeachTech Research Cohort, 18 UTEP faculty members were selected university-wide to participate in the OER/Affordable Materials Integration Program (\$3,000)
  - 2019 Department Nominee for the College of Engineering Teaching Excellence Award, Civil Engineering, UTEP



- 2019 College Nominee for the UT Regents' Outstanding Teaching Award, College of Engineering, UTEP
- 2018 Department Nominee for the Dean's Award for Teaching Excellence at UTEP
- 2017 College Nominee for the UT Regents' Outstanding Teaching Award, College of Engineering, UTEP
- 2017 Department Nominee for the UT Regents' Outstanding Teaching Award, Civil Engineering, UTEP
- 2017 TeachTech Program, 12 UTEP faculty members were selected university-wide to participate in the hands-on education design project, Academic Technologies UTEP, (\$2,000), 2017-18
- 2016 Dean's nomination for American Society of Engineering Education (ASEE)-NETI-1 workshop, (\$2,000)
- 2010 Graduate Assistantship, Rinker School of Construction Management, University of Florida
- 2006 Student Recognition Award- University of Engineering and Technology, PK
- 2001 UET Meritorious Scholarship- University of Engineering and Technology, PK  
2002, 2004, 2005
- 1999 Student Recognition Award (HIJRI Scholarship) - Board of Intermediate and Secondary Education, PK. Awarded to the top ten students in the country

### **Pedagogical Development**

- 2020 Society of Women Engineers- WE 20 Conference and Career Fair, November 2-13, 2020 (Invited)
- 2020 Autodesk University Conference, November 17-20, 2020
- 2020 Smart Cities Week Global Experience, October 19- November 9, 2020
- 2020 ASU+GSV 2020 Virtual Summit, The Dawn of the Age of Digital Learning, September 29- October 1, 7, 8, 2020, This five-day event gathered more than 30,000 entrepreneurs, business leaders, investors, policy makers, philanthropists, and educators from over 135 countries globally to accelerate innovation in education and talent.
- 2020 Effective Remote Instruction: Reimagining the Engineering Student Experience, IEEE Virtual Conference, July 27-31, 2020
- 2020 Building a Stronger Curriculum with Kiewit, Kiewit University, Omaha Nebraska, July 22-23, 2020- **Invited participant**
- 2020 REMOTE: The Connected Faculty Summit, virtually hosted by Arizona State University, July 13-14, 2020
- 2020 Teaching with Video Series: Creating (Sustainable) Mini-Lectures with Video, UTEP Academic Technology Center, February 12, 2020
- 2020 Blackboard Retention Center Workshop, UTEP Academic Technology Center, February 4, 2020

- 2019 Building a Stronger Curriculum with Kiewit, Kiewit University, Omaha Nebraska, July 22-23, 2019- **Invited participant.**
- 2019 From Identity to Impact, 2019 NSF Engineering Education and Centers (EEC) Grantees Conference, October 23, 2019, **Invited participant.**
- 2019 Engineering Inclusive Classrooms: Guiding Principles and Strategies, ASEE workshop, April 2019
- 2019 Transforming Engineering Education for a Sustainable World, Indo-Universal Collaboration for Engineering Education (IUCEE), April 2019
- 2019 Retention Center Workshop, UTEP Academic Technology Center, March 26<sup>th</sup>, 2019
- 2019 Learn how to add videos into your Blackboard courses using N B C Learn, UTEP Academic Technology Center, March 6<sup>th</sup>, 2019
- 2019 Association of College and University Educators (ACUE) Course in Effective Teaching Practices, September 2018-March 2019- **Invited participant.**
- 2018 ABET Fundamentals of Program Assessment Workshop, Baltimore Maryland, October 2018
- 2018 Olin Summer Institute, Designing Student-Centered Learning Experiences, sponsored by the Olin College of Engineering, MA, June 4-5, 2018- **Invited participant.**
- 2018 UTEP's centrally supported Classroom Response System (CRS), UTEP Academic Technology Center, January 10, 2018
- 2018 TeachTech Research Cohort (2018-2019), UTEP Academic Technology Center, August 23, 2018
- 2018 Skillport Overview, UTEP Edge, August 30, 2018
- 2017 Faculty Development Workshop: Enhancing Student Engagement, sponsored by the STEM Degree Accelerator Project (funded by Educate Texas), El Paso, July 27-28, 2017
- 2018 Faculty training on Optimizing the Practice of Mentoring, Sponsored by the National Research Mentoring Network and University of Minnesota Clinical and Translational Science Institute, January 17<sup>th</sup>, 2017
- 2017 AASHE Sustainability Across the Curriculum Leadership Workshop, Emory University, Atlanta, January 2017
- 2017 Blackboard Hidden Treasures Workshop, UTEP Academic Technology Center, September 20, 2017
- 2016 DBIA Educator Workshop, Denver CO, August 7-11, 2016- **Invited participant.**
- 2016 ASEE-NETI-1, Effective Teaching for Engineers, San Diego CA, 5-6 January 2016- **Invited participant.**
- 2016 ASCE ExCEED Teaching Workshop, 2016- **Invited participant.**
- 2015 Moodle Course Management System (CMS) Training- 2015
- 2015 Critical Path Method, CEU: 0.1, ASCE Certificate for demonstrating a commitment to engineering excellence through lifelong learning, 2015
- 2014 Science Policy Training, Science Outside the Lab- Arizona State University's Consortium for Science, Policy and Outcomes (CSPO), Washington DC, Scheduled May 2014- **Invited participant.**
- 2011 Certificate of participation- Academic Technology, Graduate School & the AT Teaching Center, University of Florida, 2011
- 2006 Faculty Development Workshop, Higher Education Commission Pakistan, University of Engineering & Technology Pakistan, July 14-17, 2006

## SERVICE AND HONORS

### Professional Honors

- 2020 University of Texas at El Paso 5 year-Service Recognition Award
- 2020 Certificate of Appreciation- Merit Review for the 2020 U.S. DOE Technology Commercialization Fund (TCF), to evaluate multimillion-dollar funding applications
- 2019 Certificate of Appreciation- Merit Review, Oak Ridge Institute of Science and Education managed by Oak Ridge Associated Universities (ORAU) for DOE
- 2018 Certificate of Appreciation- Merit Review for the 2018 U.S. DOE Technology Commercialization Fund (TCF), to evaluate multimillion-dollar funding applications
- 2017 Outstanding Reviewer, Elsevier Applied Energy, Elsevier
- 2017 Certificate of Appreciation as a scientific reviewer for the 2017 AASHE Conference and Expo
- 2016 Certificate of Appreciation as a scientific reviewer for the 2016 AASHE Conference and Expo
- 2016 Invited member of the President's Advisory Committee on Sustainability at The University of Texas at El Paso
- 2015 Who's Who in Higher Education, AcademicKeys
- 2014 UF Science Policy Training Award- awarded to one graduate student per year under NSF I-CUBED grant
- 2012 Green Chord Award, Green Graduation Challenge, Gators Going Green Organization, University of Florida
- 2011 Prairie Project Graduate Fellow, Sustainable UF, the University of Florida, awarded to only ten students/year
- 2010 UF Altrusa Marilyn Little Scholarship Award, awarded to only two international students per year for their academic and service excellence
- 2009 CEMEX Construction Scholarship, UF
- 2009 Honorary membership of Sigma Lambda Chi, USA, awarded to top 5% graduate students at the Rinker School of Construction Management

### **UTEP Committees Served**

#### ○ Department

- Member, New faculty search committee (Assistant Professor-Tenure Track, Smart Cities), UTEP Civil Engineering, Fall 2020- Spring 2021
- Master of Ceremonies, Civil Engineering Graduation Spring 2020
- Member, New faculty search committee (Assistant Professor of Instruction), UTEP Civil Engineering, Fall 2019- Spring 2020
- Faculty adviser, Associated Schools of Construction (ASC) student chapter at UTEP (2018-Present)
- ABET accreditation committee member, Bachelor of Construction Engineering and Management Program, UTEP Civil Engineering (2018-present)
- Academic advisor to CEM undergraduate students – about 50+ per semester- 2016-Present
- Member, New faculty search committee (Assistant Professor-Tenure Track), UTEP Civil Engineering, Fall 2016- Spring 2017- successful search
- Member of Senior Design Judging Panel Fall 2015- Spring 2019.
- UTEP Faculty Senate departmental representative alternate 2015-2017
- Member of the Evaluation Committee, Senior Design Projects, UTEP Civil Engineering, Fall 2014- Present
- Faculty adviser, Associated General Contractors (AGC) student chapter at UTEP (2014-2016)
- Committee member, Development of the online Master of Construction Management

- program 2014-16, UTEP Civil Engineering
  - Committee member, Bachelor of Science in Construction Engineering and Management approval from Texas Higher Education Coordinating Board (THECB) 2014-15, UTEP Civil Engineering
- School/College
  - College of Engineering representative for the Academic Innovation Advisory Council, 2020-Present
  - Member, College of Engineering Building Safety Committee- Prepared a comprehensive safety plan for limited campus operations due to COVID-19, 2020
  - Member, New faculty search committee (Assistant Professor- Tenure Track), UTEP Electrical and Computer Engineering, Fall 2017-Spring 2018
- University
  - UTEP: President Advisory Committee on Sustainability (2015-Present)
  - UTEP: Faculty Marshall, Spring 2015 commencement
  - UFL: Sustainable UF program: graduate student member
  - UFL: Chair of the International Affairs Committee- Graduate Student Council (2013-14)
  - UFL: President of the Graduate Student Advisory Council (GSAC) (2013-14)

### **Membership in Professional Societies**

<b>Year</b>	<b>Role</b>	<b>Organization</b>
2020- Present	Member	International Society for Intelligent Construction (ISIC)
2019-Present	Faculty Mentor-Student Chapter	Associated Schools of Construction (ASC)
2018-Present	Review Committee	VentureWell Faculty Grant Proposals
2017-Present	Review Committee	AASHE Awards Committee
2017-Present	Professional Member	Design-Build Institute of America (DBIA)
2015-Present	Associate Member	American Society of Civil Engineers (ASCE)
2015-Present	Professional Member	American Society for Engineering Education (ASEE)
2014-Present	Faculty member	Institute for Sustainable Infrastructure
2013-Present	Member	Civil Gators
2013-2014	Member	Women in Science and Engineering (WISE), UF
2011-2014	Graduate student member	Graduate Student Advisory Council (GSAC), Innovation through Institutional Integration (I-cubed (i <sup>3</sup> )) program, University of Florida
2011-2014	Graduate student member	Center for Advanced Construction Information Modeling (CACIM), Rinker School of Building Construction, University of Florida
2010-2014	Student member UF chapter	American Society of Civil Engineers (ASCE)
2010- 2014	Student member	American Concrete Institute (ACI)
2010- 2014	Student member	American Society for Testing and Materials (ASTM)
2009-Present	Member	International Building Performance Simulation Association (IBPSA-USA)

2008-Present	Member	National Association of Women in Construction (NAWIC)
2008-Present	Honorary membership	Sigma Lambda Chi

### **Other Professional Activities and Public Service**

#### **Reviewer**

##### ***a. Grants***

- Academic grant proposals review, VentureWell, 2021
- Independent Merit Reviewer for proposals, DOE-NE's Consolidated Innovative Nuclear Research- Construction Group, 2019, 2020
- Independent Merit Reviewer for proposals to the U.S. Department of Energy's (DOE's) Technology Commercialization Fund (TCF). Administered by DOE's Office of Technology Transitions (OTT), 2019
- U.S. Department of Energy Office of Technology Transitions- Independent merit reviewer for the 2018 Technology Commercialization Fund (TCF), 2018

##### ***b. Book proposals***

- Construction for a Regenerative Future, Routledge | Taylor & Francis Group, 2020
- Life-Cycle Asset Investment and Management of Sustainable Infrastructure Systems, McGraw-Hill, 2019

##### ***c. Journals (reviewed more than 40 journal papers)***

- ASCE Journal of Computing in Civil Engineering
- Elsevier Journal of Safety and Health at Work
- Elsevier Applied Energy
- Elsevier Energy and Buildings
- Elsevier Building and Environment
- Elsevier Safety Science
- Journal of Construction in Developing Countries
- Canadian Journal of Civil Engineering
- American Journal of Civil Engineering and Architecture
- American journal of Materials Engineering and Technology
- Bentham Open Civil Engineering Journal
- International Journal of Civil Engineering and Construction Science (AASCIT)
- MDPI International Journal of Environmental Research and Public Health
- MDPI Journal of Materials
- MDPI Energies
- MDPI Sustainability
- MDPI Applied Sciences
- MDPI Buildings
- PLOS ONE
- The Journal of Sustainable Finance & Investment
- Taylor and Francis Critical Reviews in Environmental Science and Technology
- Taylor and Francis Journal of Sustainable Finance & Investment

##### ***d. Conferences (reviewed more than 60 papers)***

- 2021 ASCE International Conference on Computing in Civil Engineering (i3CE2021), September 12-14, 2021, Orlando, Florida

- 2021 American Society of Engineering Education (ASEE) Conference, June 27-30, 2021, Long Beach, California
- International Conference on Wastewater Technologies and Environmental Treatment (ICWTET), October 18-19, 2019, Kuala Lumpur, Malaysia
- 2019 AASHE Sustainability Award Invited Judge: Campus Sustainability Research category for journal-published Research in Engagement
- 2019 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference & Expo
- International Conference on Urban Planning and Property Development (UPPD) Program Committee, May 27-28, 2019, Singapore
- 2018 AASHE Sustainability Award Invited Judge: Campus Sustainability Research category for journal-published Research in Engagement
- 2018 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference & Expo
- 2017 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference & Expo
- 2016 International Conference on Architectural and Civil Engineering
- 2014 International Conference on Computing in Civil and Building Engineering, ASCE
- 2013 International Conference on Computing in Civil and Building Engineering, ASCE

#### Editorial Board Member

- Sustainability Journal- Editorial Board Member as a Topic Editor, Invited Membership, [https://www.mdpi.com/journal/sustainability/topic\\_editors](https://www.mdpi.com/journal/sustainability/topic_editors)
- International Journal of Civil Engineering and Construction Science-AASCIT (since 2015)
- Journal of Energy- AASCIT (since 2015)

#### Guest Editor

- International Journal of Social Ecology and Sustainable Development (IJSESD), 2017

#### Technical Program Committees

- Review committee, 2021 American Society of Engineering Education (ASEE) Annual Convention and Exposition, Long Beach, California, June 27-30, 2021
- Review committee, International Conference on Wastewater Technologies and Environmental Treatment (ICWTET), October 18-19, 2019, Kuala Lumpur, Malaysia
- Review committee, International Conference on Urban Planning and Property Development (UPPD) Program Committee, May 27-28, 2019, Singapore
- Program committee member- International Conference on Sustainable Energy and Environment Sensing, Cambridge, United Kingdom, 2-3 April 2018
- Review committee- International Conference on Sustainable Design, Engineering and Construction (ICSDEC 2016) being held at the College Avenue Commons at the Arizona State University, Tempe, AZ from May 18th to 20th, 2016.
- Technical program committee member- International conference of Architecture, Structure Engineering and Civil Engineering (AECE) 2016
- Technical committee member- Sustainability and Resilience Summit (2015-present)
- Member of Leadership Team for the International Conference on Sustainable Design, Engineering & Construction (ICSDEC 2015)

#### External Ph.D. Examiner

- Faculty of Management Studies, University of Central Punjab, Pakistan (2018)

- Department of Architecture, University of Punjab, Lahore, Pakistan (2017, 2018)

#### Session Chair/Judge

- Session chair, 2018 International Conference on Advances in Civil, Architecture and Environmental Engineering, Kuala Lumpur, Malaysia, July 19 – 20, 2018
- Session chair, 2014 International Conference on Computing in Civil and Building Engineering, Orlando, FL
- Mentor, UF University Minority Mentor Program (UMMP), August 2013- August 2014
- Poster judge, UF Annual Graduate Research Day, October 28<sup>th</sup>, 2012
- Graduate Staff, 2012 ASCE International Workshop on Computing in Civil Engineering, Clearwater Beach, FL, June 17-22
- Poster judge, Annual NSF Research Day, University of Florida, October 25<sup>th</sup>, 2011
- Graduate Staff, 2011 ASCE International Workshop on Computing in Civil Engineering, Miami, FL, June 19-22
- Coach to Rinker BIM Team in the area of energy simulation techniques/methods, 2010-2014

#### Community Service

- El Paso STEM Expo organized by Harmony Public Schools - El Paso, November 2019
- 7th Annual El Paso STEM Expo organized by Harmony Public Schools - El Paso, April 27, 2018
- Assisted the City of El Paso Sustainability Office to apply for Climate Action Champion recognition, 2014