

Mohsin Khalid Siddiqui

Civil Engineering Department, University of Delaware

EDUCATION

University Of Texas at Austin PhD – Civil Engineering Civil Engineering - Construction Engineering and Project Management	August 2008
University of Wisconsin – Madison MS – Civil Engineering Construction Engineering and Management	August 2003
University of Wisconsin – Madison MS – Computer Sciences	May 2003
University of Engineering and Technology, Lahore, Pakistan BS – Civil Engineering (<i>with Honors</i>)	July 1999

CERTIFICATIONS/LICENSES/VOLUNTEERING

Professional Engineer PE Licensed PE in the State of Wyoming, Civil: Construction	2020- to date
Project Management Institute Project Management Professional - PMP®	2011-to date
ABET Inc. ABET IDEAL Scholar ABET PEV for EAC and ANSAC, ANSAC Commission Member (since 2020)	2013- to date
American Society for Civil Engineers ASCE ExCEED Teaching Fellow	2019

EXPERIENCE

Assistant Professor, 08/2018 to date

Department of Civil and Environmental Engineering, University of Delaware, Newark, DE
Construction Engineering and Management area faculty member tasked with teaching undergraduate courses in the CEM curriculum. Responsible for developing new course content and all other aspects related to the courses. Student advisor for the CEM sophomore students. Actively involved in assessment and accreditation activities. Attended the Mini-ExCEED workshop by ASCE at University of Delaware. ASCE ExCEED Fellow 2019, selected as Assistant Mentor for an online ExCEED offering in 2020. Volunteering for ABET as a PEV, Team Chair, and ANSAC Commission Member. Department liaison for online teaching support. Program lead for the preparation for Initial ABET accreditation review in Fall 2022 and writing Self Study reports for ABET EAC and ANSAC. Member of the department undergraduate committee, leadership committee, and showcase/recruitment committee. Actively involved in undergraduate recruitment on blue and gold days.

Assistant Professor, 08/2015 to 07/2018

Department of Civil and Architectural Engineering, Qatar University, Doha, Qatar

Faculty member in the Civil Engineering area with concentration in Construction Engineering and Management. Research focuses on Engineering Education, Computer Applications in CEM, Data Sensing and Analysis in support of Construction Safety and Productivity, Renewable Energy and Sustainability related issues for CEM. Teaching PRIMAVERA to students since 2009 and expert level command on various other Construction Project Management software.

Assistant Professor, 09/2008 to 08/2015

Construction Engineering and Management Department – King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia

Designed new graduate courses and fulfilled the teaching responsibilities for these courses. Research focused on Scheduling and IT applications in CEM. Set up the new CEM computer lab equipped with the latest and industry leading software applications. Actively participated in ABET EAC accreditation of the MS and ME programs, was the chair of the Department ABET Committee and member of multiple College and University committees on assessment and accreditation. Member of Scientific Research Council and won three excellence awards.

Project Management Training Consultant, 09/2008 to 06/2015

Saudi ARAMCO, Dhahran, Saudi Arabia

Worked as a training consultant for Saudi ARAMCO and coordinated / conducted parts (SAPMT) short courses (80+) focused on Planning & Scheduling, Construction Management, Cost Engineering, Management of Detailed Engineering, Best Practices for Construction Projects, and Managing Small & Multiple Projects. Expert familiarity with Saudi Aramco Capital (including BI 19) projects budgeting/execution life cycle (GIs and SAEPs).

Project Management Training Consultant, 01/2011 to 06 / 2011

Saudi Basic Industries Corporation - SABIC, Jubail, Saudi Arabia

Worked as a Project Management training consultant for SABIC (through KFUPM). Course coordinator for a short course titled Construction Project Management. Developed course content and delivered the course in line with SABIC procedures and guidelines for management of capital affiliate projects.

Software Engineer, 04/2004 – 01/2005

Techlogix Pakistan, Lahore.

Worked as a team member and team leader on business process improvement (BPI) for a textile group using IBM Websphere Business Modeler (Purchasing and Inventory processes).

Assistant Professor (Computer Sciences), 08/2003 – 06/2004, 01/2005 – 05/2005

University of Management and Technology (UMT), Lahore, Pakistan

Taught multiple courses at the Graduate and Undergraduate level with emphasis on Design of Database Management Systems, Operating Systems, and Object Oriented Programming.

Office Engineer, 08/1999 – 08/2000

Associated Consulting Engineers – ACE (Pvt.) Ltd., Lahore, Pakistan

Worked on a portion of a nation wide housing project. Assisted the Team Leader in all technical and contractual matters on the 13 projects.

FUNDED RESEARCH PROJECTS (PI Role only):

Project ID: 11-ELE1652-04 “Towards an Intelligent Jobsite – Use of Advanced Sensing Technologies on Construction Jobsites and Industrial Facilities”

Funded by King Abdulaziz City of Science and Technology, National Science Technology and Innovation Plan (SAR: 1,135,700 ~ US\$ 300,000)

Status: Completed (2012-2014)

Role: Principal Investigator

Project ID: IN10102 “Developing Quantitative Quality Measures for Network Schedules”

Funded by KFUPM – Internally Funded Project (SAR 58,000 ~ US\$ 15,000)

Status: Completed (2011-2012)

Role: Principal Investigator

PUBLICATIONS

Peer Reviewed Journal Articles (accepted/published):

1. Moohialdin, Ammar S, Suhariadi, Bambang T., Islam, M. S., and **Siddiqui, M. K.** (2022) “Physiological Impacts of Construction Workers under Extremely Hot and Humid Weather”, *International Archives of Occupational and Environmental Health*, <https://doi.org/10.1007/s00420-021-01785-w>
2. Chen, X., Chang-Richards, A.Y., Pelosi, A., Jia, Y., Shen, X., **Siddiqui, M.K.** and Yang, N. (2021), "Implementation of technologies in the construction industry: a systematic review", *Engineering, Construction and Architectural Management*, <https://doi.org/10.1108/ECAM-02-2021-0172>
3. Umer, W.; **Siddiqui, M.K.** (2020) “Use of Ultra Wide Band Real-Time Location System on Construction Jobsites: Feasibility Study and Deployment Alternatives”. *International Journal of Environmental Research and Public Health*, 17(7) 2219.
4. Moohialdin, Ammar S. M., Suhariadi, Bambang T., and **Siddiqui, Mohsin** (2018). “University Students Sport's Activities Assessment in Harsh Weather Conditions.” *International Journal of Medical, Medicine and Health Sciences*, 11.0(3).
5. Bubshait, A. A., **Siddiqui, M. K.**, and Al-Buali, A. A. (2014) "Role of Communication and Coordination in Project Success: Case Study" *Journal of Performance of Constructed Facilities*, Vol. 29, Issue 4
6. Becerik-Gerber , B., **Siddiqui, M. K.**, Brilakis, I., El-Anwar, O., El-Gohary, N., Mahfouz, T., Li, S., Jog, G.M. and Kandil, A.A. (2013) “Civil Engineering Grand Challenges: Opportunities for Data Sensing, Information Analysis, and Knowledge Discovery” *ASCE Journal of Computing in Civil Engineering*, Vol 28, Issue 4
7. **Siddiqui, M. K.**, and O'Brien, W. J. (2009). "A Formal Mapping Based Approach for Distributed Schedule Coordination on Projects." *Advanced Engineering Informatics*, 23, 104-115
8. O'Brien, W.J., Hammer, J., **Siddiqui, M.K.**, and Topsakal, O. (2008). "Challenges, Approaches and Architecture for Distributed Process Integration in Heterogeneous Environments". *Advanced Engineering Informatics* 22, 28-44
9. Adams, T.M., Juni, E., **Siddiqui, M.K.**, Dzienkowski, J.E. (2005). "Integrated field and office tools for bridge management". *TRR Journal of the Transportation Research Board* 1933, 35-43

Peer Reviewed Conference Papers (accepted or published):

1. Moohialdin, Ammar S.M., Suhariadi, Bambang T., & **Siddiqui, Mohsin K.** (2018) Practical validation measurements of a physiological status monitoring sensor in real construction activities. In 4th Australasia and South-East Asia Structural Engineering and Construction Conference, 3-5 December 2018, Brisbane, Queensland, Australia
2. **Siddiqui, M.** (2014) Taxonomy of Work Spaces for Sensor-Driven Jobsite Management. *Computing in Civil and Building Engineering* (2014): pp. 1070-1077.
3. Golparvar-Fard, M., Tang, P., Cho, Y., and **Siddiqui, M.** (2013) Grand Challenges in Data and Information Visualization for the Architecture, Engineering, Construction, and Facility Management Industries. *Computing in Civil Engineering* (2013): pp. 849-856.
4. Jarrah, R. T. and **Siddiqui, M. K.**, (2012) “Sustainability: Opportunities and Challenges from a Construction Contractor’s Perspective” ICSDEC 2012, Fort Worth, TX

5. **Siddiqui, M. K.**, and Rafiuddin, M. (2012) "Identifying Scheduling Inefficiencies for Industrial Projects using the Flowline View: A Case Study." *Proc., International Conference on Computing in Civil Engineering*, ASCE, Clearwater Beach, FL
6. **Siddiqui, M. K.**, Alrasheed, S. D., Mohammed, A. R., Amaan, A., Aljaroudi, W. H., Al-Jughaiman, A. A., Alsaikhan, F. M., and Alhashem, B. M. (2012) "Integrating Sustainability in the Curriculum through Capstone Projects: A Case Study." *Proc., 2012 ASEE Annual Conference and Exposition American Society for Engineering Education*, AC 2012-3110.
7. Rafibakhsh, N., Gong, J., **Siddiqui, M. K.**, Gordon, C., and Lee, H. F. (2012) "Analysis of XBOX Kinect Sensor Data for Use on Construction Sites: Depth Accuracy and Sensor Interference Assessment." *Proc., Construction Research Congress, ASCE*, 848-857.
8. Kassem, M., Dawood, N., Benghi, C., **Siddiqui, M. K.** and Mitchell, D. (2010). "Coordination and Visualization of Distributed Schedules in the Construction Supply Chain: A Potential Solution." *Proceedings of the CONVR 2010*, Sendai, Japan, p. 77
9. Khan, M.A. and **Siddiqui, M. K.** (2010) "Quantitative Assessment of Network Based Schedules" *Proceedings of ICCCBE 2010*, Nottingham, UK, p. 273
10. Wang, T.-K., Wakefield, R., O'Brien, W. J., and **Siddiqui, M. K.** (2008). "Contractor's Perspective of Schedule Mapping Approach--Problems and Challenges." *Proceedings of ICCCBE-XII & INCITE 2008*, Beijing, China.
11. O'Brien, W. J., **Siddiqui, M. K.**, and Wang, T.-K. (2007). "Process Connectors: Distributed Schedule Coordination via Alternative Exploration and Evaluation." *Proceedings of ASCE Computing in Civil Engineering*, Pittsburgh, PA, 355-363.
12. O'Brien, W.J., Hammer, J., **Siddiqui, M.K.** (2006). "From SEEKing Knowledge to Making Connections: Challenges, Approaches and Architectures for Distributed Process Integration". *Lecture Notes in Artificial Intelligence* 4200, 500-518
13. **Siddiqui, M.K.**, O'Brien, W.J., Wang, T.-K. (2006) "A Mapping Based Approach to Schedule Integration in Heterogeneous Environments". *ICCCBEXI*, Montreal, Canada, 2615-2624

Reports:

- Becerik-Gerber, B., El-Anwar, O., El-Gohary, N., Mahfouz, T., **Siddiqui, M. K.**, Brilakis, I., Kandil, A., Jog, G., and Li, S. (2011). "Grand Challenges for Data Sensing and Analysis." Report for the Technical Council on Computing and Information Technology, Data Sensing and Analysis Committee, American Society of Civil Engineers (ASCE).

Editorials:

- Gong, J., **Siddiqui, M.**, Caldas, C. H., and O'Brien, W. J. (2011). "The special issue of 26th International Symposium on Automation and Robotics in Construction." *Automation in Construction*, 20(6), 661.

FACULTY DEVELOPMENT COURSES DELIVERED

- Use of Instructional Technologies with Blackboard LMS, Blackboard Academic Adoption Day, November 27, 2017, Qatar University, Doha, Qatar
- Cognitive Psychology and Higher Education Teaching, November 15, 2017 – Office of Faculty and Instructional Development, Qatar University, Doha, Qatar
- Instructional technologies for Higher Education Teaching, November 8, 2017 – Office of Faculty and Instructional Development, Qatar University, Doha, Qatar
- Managing references using Endnote Software, October 23, 2017 – Office of Faculty and Instructional Development, Qatar University, Doha, Qatar
- Fundamentals of Program Assessment and Accreditation, September 19, 2013, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

EDITORSHIP/SERVICE

- **Editorial Board Member** of ISI ranked "Advanced Engineering Informatics", 2011-onwards.

- **Guest Editor** for the special issue (ISARC 2009) of **ISI** ranked “**Automation in Construction**” Journal.
- **Conference Technical Co-Chair**, International Conference on Sustainability in Design, Engineering, and Construction 2012 (Sponsored by ASCE – Construction Institute)
- **Reviewer for:** Advanced Engineering Informatics, Automation in Construction, Construction Management and Economics, Journal of Professional Issues in Engineering Education and Practice, Journal of Management in Engineering ASCE, Journal of Computing in Civil Engineering ASCE, Engineering, Construction, and Architectural Management.

AWARDS AND HONORS

ABET ANSAC Commission Member	2020
ASCE ExCEED Fellow	2019
KFUPM Award for Distinguished Short Course	2014-15
Excellence in Teaching Award (CED) KFUPM	2012-13
Excellence in Academic Advising (CED) KFUPM	2011-12
Richard and Shirley Tucker Scholarship in CEPM (UT-Austin)	2006, 2007
Certificate of Merit (BS – UET, Pakistan)	1999
Degree with Honors (BS – UET, Pakistan)	1999

COMPUTER SKILLS

Planning and Scheduling Software

P3, Primavera 5.0 & 6.0, P6 R8.3, P6 R18, MS Project 2003, 2007, Vico Control/Vico Office

Risk Analysis Software

Palisade @Risk for Project, Palisade Decision Tools Suite

Programmings Languages

C++, Java, nesC, Lua, Visual Basic.Net, PASCAL, FORTRAN

AFFILIATIONS

ASCE – American Society of Civil Engineers	Member, ABET PEV Candidate
CMAA – Construction Management Association of America	Faculty Member (PEV)
ASEE – American Society for Engineering Education	ABET PEV
ABET Inc. (ANSAC)	Commission Member, Team
Chair	
ABET Inc. (EAC and ANSAC)	Program Evaluator - PEV
PEC – Pakistan Engineering Council	Professional Engineer
PMI – Project Management Institute	Member / Certified PMP
WYOPEPLS – Wyoming Board of Professional Engineers and Land Surveyors	Licensed Professional Engineer
PE	