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Professor and Lab Director
Kenneth Robson BIM+Viz Lab
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EDUCATION

Doctor of Philosophy, Instructional Psychology and Technology, University of Oklahoma, 2015
Master of Science in Construction Science, University of Oklahoma, 1997
Master of Business Administration, University of Oklahoma, 1997
Bachelor of Interior Design, University of Oklahoma, 1991

PROFESSIONAL CREDENTIALS

Associate DBIA, Design-Build Institute of America, February 2015
LEED Accredited Professional, Green Building Certification Institute, May 2009

ACADEMIC EXPERIENCE

Summer 2017 – present	Professor, Construction Science, University of Oklahoma
Fall 2012 – Summer 2017	Associate Professor, Construction Science, University of Oklahoma
Fall 2015 – Summer 2016	Interim Director, Construction Science, University of Oklahoma
Spring 2015 – Summer 2015	Interim Assoc. Director, Construction Science, University of Oklahoma
Fall 2006 – Summer 2012	Assistant Professor, Construction Science, University of Oklahoma
Spring 2005 - 2006	Adjunct Instructor, Construction Science, University of Oklahoma
Fall 1993	Adjunct Instructor, Architecture, University of Oklahoma

Courses Taught

CNS 1213	Computers in Construction
CNS 2813	Construction Documents and Quantity Surveying
CNS 3413	Construction Communications
CNS 3512	Cost Estimating 1
CNS 3612	Project Controls Lab 1
CNS 3943	Field Work
CNS 4133	BIM for Constructors
CNS 4862	Residential Construction
CNS 4213	Design-Build Principles and Practices
CNS 4993	Construction Science Capstone – Residential
CNS 4993	Construction Science Capstone – Commercial
CNS 5023	Research Methods in PDC
CNS 5123	Fundamentals of BIM
CNS 5213	Design-Build Principles and Practices
CNS 5313	Advanced BIM
CNS 5613	Information Technology Applications for Construction
CNS 5813	Facilities Acquisition Planning
CNS 5960	Directed Readings
CNS 5970	BIM

CNS 5970	Design-Build Principles and Practices
CNS 5970	Research in Construction
ARCH	Computers in Architecture
LSTD5413	Interdisciplinary Study in Natural Science
PDC 6003	History/Philosophy in Planning, Design, and Construction
PDC6023	Advanced Research Methods

Courses/Projects Developed

- Construction Communication (CNS 3413) – A communication course designed to focus on written, visual, and oral communication appropriate to the Construction industry. The course will expand on the fundamentals of communication with specific instruction about the techniques and tools used to communicate with both internal and external team members. Fall 2016.
- Design-Build Principles and Practices (CNS 4213/ CNS 5213) – A course designed to introduce design and construction students to the principles and practices of design-build. Project based learning is used to reinforce the concepts and principles presented in the course. The course is approved by the Design-Build Institute of America (DBIA) and meets its University Program curriculum requirements for certification. Students that successfully complete the course requirements will receive *Certificates of Completion* for each of the completed core courses required and earn credit for the professional designation as an *Associate DBIA Professional*. Spring 2016.
- Fundamentals of BIM (CNS5123) – A course designed to introduce the fundamentals of BIM for construction to first semester graduate students. Fall 2014.
- Advanced BIM (CNS5313) – A course designed to develop in depth knowledge of BIM as a tool and as a method for the design, construction, and operations and maintenance phases in facility’s lifecycle. Strategies for implementation and adoption are emphasized throughout the course. Fall 2014.
- C5, **McCuen, T.**, Pober, E., & Cricchio, A. College of Architecture Interdisciplinary Capstone Charette. A collaborative project for senior architecture, interior design, and construction science students. Spring 2014.
- BIMStorm OKC: A Virtual Event to Build Community and Enhance Connectivity, **McCuen, T.** & Fithian, L., University of Oklahoma Dream Course. An interdisciplinary course project for Construction Science and Architecture student team collaboration with participation from the Oklahoma City Planning Department and industry professionals, fall 2012.
- BIM for Virtual Construction: A Collaboration of Three Universities, **McCuen, T.**, Speidel, E., & Liu, J. This interuniversity project brought together students from the construction science and management programs at the University of Oklahoma, California Polytechnic State University, and Auburn University to create a BIM for construction. Industry sponsors provided student teams with a real-world project, fall 2011.
- BIM for Constructors (CNS4122) - A Building Information Modeling (BIM) course designed for the construction professional. A senior level course focused on the concepts, core business processes, and software from the constructor’s perspective, fall 2010.

- Project Controls Lab 1 (CNS3612) – A lab designed for students’ application of cost estimating and project planning knowledge in a hands-on environment. Students demonstrate their knowledge using analytical and decision making skills, fall 2010
- “Specializing in Health Care”, Boeck, D, **McCuen, T** & Wachter, H, University of Oklahoma Dream Course. An interdisciplinary course between students of Construction Science, Architecture, and Interior Design, focused on Integrated Practice in the design and construction of Health Care facilities, Office of the Senior Vice President and Provost, fall 2008.
- BIM - Building Information Modeling (CNS4970/CNS5970) - A cross-listed course for Construction and Architecture students. An advanced level undergraduate and senior level course focused on optimizing the methodology and technology of BIM in a hands-on, collaborative, immersive, cross-functional team environment, winter 2007.
- Jefferson Park Neighbors Association, student service learning project, CNS 4993, capstone project, spring 2007.
- Residential Production Construction (CNS4993/CNS4863) - An undergraduate capstone class focused on production construction in the residential construction industry, spring 2005

Courses Re-Designed

- Advanced Research Methods (PDC6023) – A doctoral course designed to explore discipline-based qualitative and quantitative research methods; develop dissertation research design and support documentation; apply for funding for the dissertation project.
- Cost Estimating 1 (CNS3512) - An undergraduate course for cost estimating that integrates project planning aspects and factors impacting project costs.
- Computers in Construction (CNS1212) - An undergraduate course introducing students to Excel 2007, SketchUp Pro, and Autodesk Revit Architecture.
- Facilities Acquisition Planning (CNS5813) - A graduate class for the analysis and subsequent development of a facility from the owner’s perspective, fall 2006

Other Teaching Activities

- Design-Build Student Competition, Coach, ASC Region 8, fall 2023.
- Design-Build Institute of America Student Competition, Coach, fall 2023.
- Design-Build Student Competition, Coach, ASC Region 5, 1st place, spring 2023.
- Design-Build International Student Competition, Coach, ASC Region 8, 4th Place, fall 2022.
- Design-Build Institute of America Student Competition, Coach, 1st place Southwest Region, fall 2021.
- Design-Build Student Competition, Coach, ASC Region 5, spring 2021.
- Design-Build Student Competition, Coach, ASC Region 5, 3rd place, spring 2020.
- Design-Build Student Competition, Coach, ASC Region 5, 2nd place, spring 2019.

- Design-Build Student Competition, Coach, ASC Region 5, 2nd place, spring 2018.
- Design-Build Institute of America Student Competition, Coach, 3rd place National, 1st place Southwest Region, fall 2017.
- 4th Annual Synchro Software University Challenge, Global Project Competition, Coach, Honorable Mention, spring 2017.
- Design-Build Student Competition, Coach, ASC Region 5, 2nd place, spring 2017.
- Design-Build International Student Competition, Co-Coach, ASC Region 8, 4th place, Reading England, fall 2016.
- Design-Build Institute of America Student Competition, Coach, 3rd place National, 1st place Southwest Region, fall 2016.
- Design-Build Student Competition, Coach, ASC Region 5, 1st place, spring 2016.
- Design-Build Student Competition, Coach, ASC Region 5, 1st place, spring 2015.
- Design-Build Institute of America Student Competition, Coach, 3rd place National, 1st place Southwest Region, 2014.
- Design-Build Student Competition, Coach, ASC Region 5, 2nd place, spring 2014.
- Design-Build Institute of America Student Competition, Coach, 1st place regional, fall 2013.
- Design-Build Student Competition, Coach, ASC Region 5, 2nd place, spring 2013.
- Design-Build Student Competition, Coach, ASC Region 5, 3rd place, spring 2012.
- Design-Build Student Competition, Coach, ASC Region 5, 2nd place, spring 2011.
- Design-Build Student Competition, Assistant Coach, ASC Region 5, 2nd place, spring 2007.

Student Committees/Mentorship/Advising – Ongoing

- Doctoral Dissertation Committee member, Khalida Muntasher, PhD in Civil Engineering, spring 2024 – present.
- Special Studies Project Committee Chair, Emad Najmi Sarooghi, Master of Science in Construction Management, spring 2024 – present.
- Doctoral Dissertation Committee member, Ramtin Mirmohammad Sadeghi, PhD in Planning, Design, and Construction, fall 2023 – present.
- Doctoral Dissertation Committee Co-Chair, Salma Akter, PhD in Planning, Design, and Construction, fall 2022 – present.
- Doctoral Dissertation Committee member, Ali Ceyhun Müftüoğlu, PhD in Instructional Psychology & Technology, Fullbright Scholar, spring 2020 – present.

Student Committees/Mentorship/Advising – Complete

- Special Studies Project Committee member, Swikriti Shrestha, Master of Science in Construction Management, fall 2023 – spring 2024.
- Special Studies Project Committee Chair, Tyler Sublett, Master of Science in Construction Management, spring 2023 – spring 2024.
- Special Studies Project Committee Chair, Kemi Turoti, Master of Science in Construction Management, fall 2023 – spring 2024.
- Special Studies Project Committee Chair, Pradipta Ghosh, Master of Science in Construction Management, spring 2023 – spring 2024.
- Doctoral Dissertation Committee Chair, Emad Najmi Sarooghi, PhD in Planning, Design, and Construction, fall 2022 – spring 2024 (dismissed from program).
- Doctoral Dissertation Committee member, Jacob Choate, PhD in Structural Engineering, fall 2019 – fall 2023.
- Special Studies Project Committee Chair, Jeffrey Stout, Master of Science in Construction Management, fall 2021 – spring 2023.
- Special Studies Project Committee Chair, Linda Nowlan, Master of Science in Construction Management, spring 2022 – spring 2023.
- Special Studies Project Committee Member, Nirmalya Mukherjee, Master of Science in Construction Management, fall 2022 – spring 2023.
- Special Studies Project Committee Member, Master of Science in Construction Management, Sumanth Janardhan, fall 2022 -spring 2023.
- Special Studies Project Committee Member, Olayinka Omole, Master of Science in Construction Management, fall 2021 – spring 2022.
- Doctoral Dissertation Committee Chair, Muzibur Rahman, PhD in Planning, Design, and Construction, spring 2016 – spring 2022.
- Doctoral Dissertation Committee member, Nils Gransberg, PhD in General Engineering, fall 2018 – fall 2021.
- Master’s Thesis Committee, member, Waad Al mujalli, Master in Interior Design, fall 2020 – spring 2021.
- Special Studies Project Committee Chair, Olasoji Fasalojo, Master of Science in Construction Management, fall 2020 – spring 2021.
- Special Studies Project Committee member, Tayana Ghosh, Master of Science in Construction Science, spring 2019 – fall 2019.
- Special Studies Project Committee Chair, Christelle Ndayisaba, Master of Science in Construction Science, fall 2018 – spring 2020.

- Special Studies Project Committee Chair, Akram Mahdavi Parsa, Master of Science in Construction Science, fall 2016 – spring 2019.
- Airport Cooperative Research Program 11-04 Graduate Research Award Program on Public-Sector Aviation Issues, Mentor, *Airport Building Information Modeling (ABIM) Implementation Framework for Smart Airport Life Cycle Management*, August 2018 – July 2019.
- Special Studies Project Chair, Dante Loza, Master of Science in Construction Science, spring 2017 – May 2018.
- Kiewit Women’s Construction Leadership Seminar, Dennise Pedroza, Mentor, spring 2017
- Thesis Committee Chair, Rafael Valles-Chacin, Master of Science in Construction Science, spring 2015 – summer 2016.
- Kiewit Women’s Construction Leadership Seminar, Holly Snow, Mentor, spring 2015.
- Thesis Committee member, Lacey Howard, Master of Interior Design, fall 2013 – spring 2014.
- Doctoral Committee member, Rachel Mosier, PhD in General Engineering, fall 2012 – fall 2013.
- Honors Committee chair, Todd Moran, Bachelor of Construction Science, fall 2012 – spring 2013.
- Special Studies Project committee chair, Sindhu Gundimeda, Masters of Construction Administration, Construction Science Division, fall -2011 – spring 2012.
- Thesis Committee member, Fotis Kousiakis, Masters of Landscape Architecture, Division of Landscape Architecture, fall 2011 – spring 2012.
- Professional Project Committee member, David Arthur, Masters of Architecture, Division of Architecture, fall 2011 – spring 2012.
- Graduate Committee Chair, 3 Graduates, Masters of Construction Administration, Construction Science Division, spring 2011.
- Graduate Teaching Academy, Mentor to Dominique Pittenger, OU Graduate College and the Learning, Teaching, and Writing Center, spring 2011.
- Doctoral Committee member, Dominique Pittenger, PhD in General Engineering, fall 2010 – spring 2012.
- Graduate Committee Member, 4 Graduates, Masters of Construction Administration, Construction Science Division, fall 2010.
- Thesis Committee Chair, Jason Overton, Masters of Construction Administration, Construction Science Division, fall 2010 – spring 2011.
- Professional Project Committee member, Kevin Hill, Masters of Architecture, Division of Architecture, fall 2010 – spring 2012.

- Graduate Committee Member, 9 Graduates, Masters of Construction Administration, Construction Science Division, spring 2010.
- Graduate Committee Chair, 4 Graduates, Masters of Construction Administration, Construction Science Division, fall 2009.
- Graduate Committee Chair, 7 Graduates, Masters of Construction Administration, Construction Science Division, spring 2009.
- LEED Accredited Professional exam student study group, Mentor, spring 2009.
- Graduate Committee Chair, Masters of Construction Administration, Construction Science Division, spring 2008.
- Graduate Committee Chair, Masters of Construction Administration, Construction Science Division, fall 2007.
- Graduate Committee Chair, Masters of Construction Administration, Construction Science Division, spring 2007.
- Graduate Committee Member, Masters of Construction Administration Construction Science Division, spring 2006.

PUBLICATIONS

Books [2]

- Wu, W., Mayo, G., **McCuen, T.**, Issa, R., Smith, D., *Guide to the Building Information Modeling Body of Knowledge: Metrics, KSAs, and Learning Outcomes for Developing BIM Talent*, John Wiley & Sons, Hoboken, New Jersey, 2021, 246 pages, ISBN-13: 978-1119687283.
- Gransberg, D.D., **McCuen, T.L.**, and Molenaar, K.R., co-editors, *Project Delivery Methods Professional Practice Guide, 2nd Edition*, AACE-International, Morgantown, West Virginia, 2008, 850 pages, ISBN 1885517351.

Peer Reviewed Book Chapters [4]

- **McCuen, T.**, Mayo, G., Shelbourn, M., & Scott, L., *Digital Transformation and Construction Education: Case Studies of Construction Programs in the United States, Great Britain, and Ireland*, **chapter**, Driving Transformational Change in the Built Environment, edited by Jason Underwood and Mark Shelbourn, IGI Global, ISBN-13: 978-1799866008 (print) EISBN13 – 978-1799866022| (eBook), USA, May 2021.
- McCuen, T., *BIM and Cost Estimating: A Change in the Process for Determining Project Costs*, **chapter**, Building Information Modeling: Applications and Practices, edited by Raja R.A. Issa and Svetlana Olbina, American Society of Civil Engineers, ASCE Press, ISBN 9780784413982 (print) ISBN 9780784479131 (eBook), USA, 2015, pp.63-81.
- **McCuen, T.** and Fithian, L., *Potential Harmful Environmental Impacts as a Consequence of Material and System Specifications, Installation, and Operations in Current U.S. Green Building Practices*, **chapter**, Green Buildings and the Law, edited by Julie Adshead, Spon Press, ISBN9780415559263, United Kingdom, 2011, pp. 36–50.

- McCuen, T. *Implementing Building Information Modeling in the Design-Build Process*, **essay**, in Koch J.E., Gransberg D.D., Molenaar K.R., *Design-Build Contract Administration for Owners, Engineers, and Contractors*, American Society of Civil Engineers Press, ISBN 9780784410752, Reston, Virginia, 2010, pp. 267 – 272.

Industry Standards and Guides [3]

- Christian, C., Dossick, C., **McCuen, T.** et al., *Core BIM Requirements*, chapter, National BIM Standard – United States®, Version 4, National Institute of Building Sciences buildingSMART alliance, Washington, DC, *submitted*.
- Suermann, P., Giel, B., and **McCuen, T.**, *Minimum BIM - 2nd Edition*, **chapter 5.2**, National BIM Standard – United States®, version 3, National Institute of Building Sciences buildingSMART alliance, Washington, DC, July 2015, <https://www.nationalbimstandard.org/>
- Suermann, P.C. and **McCuen, T.**, *Minimum BIM*, **chapter 5.2**, National BIM Standard – United States®, version 2, National Institute of Building Sciences buildingSMART alliance, Washington, DC, May 17, 2012, <http://www.nationalbimstandard.org/>

Professional Certification Testing and Certification Guides [1]

- McCuen, T.L., *Building Information Modeling*, **chapter**, CEP Certification Study Guide, 4th Edition, AACE International, spring 2013.

Peer Reviewed Journal Papers [6]

* Denotes Student

- Wu, W., Mayo, G., **McCuen, T.**, Issa, R., & Smith, D., *Building Information Modeling Body of Knowledge Part II: Consensus Building & Use Cases*, Journal of Construction Engineering and Management, 144(8), May 2018, [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001536](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001536)
- Wu, W., Mayo, G., **McCuen, T.**, Issa, R., & Smith, D., *Building Information Modeling Body of Knowledge Part I: Background, Framework & Initial Development*, Journal of Construction Engineering and Management, 144(8), May 2018, [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001518](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001518)
- Shelbourn, M., *Macdonald, J., **McCuen, T.**, & Lee, S., *Students' Perceptions of BIM Education in the Higher Education Sector – a UK and US Perspective*, Industry and Higher Education, 31(5), pp. 293-304, 2017, <http://journals.sagepub.com/doi/10.1177/0950422217725962>
- Hosseini, R., Banihashemi, S., Chileshe, N., Namzadi, M., Udaaja, C., Rameezdeen, R., & **McCuen, T.**, *BIM Adoption within Australian Small and Medium-sized Enterprises (SMEs): an innovation diffusion model*, Journal of Construction Economics and Building, 16(3), pp. 71-86, 2016. **BEST PAPER AWARD**
- **McCuen, T.** & Pober, E., *Process and Structure: Performance Impacts on Collaborative Interdisciplinary Team Experiences*, Journal of IT in Construction (ITcon), vol. 21 Special Issue, pp. 177–187, 2016, <https://www.itcon.org/paper/2016/12>
- **McCuen, T.**, Suermann, P., & Krogulecki, M. J., *Evaluating Award Winning BIM Projects Using the National Building Information Model Standard Capability Maturity Model*, Journal of Management in Engineering, April 2012, 28(2), ISSN0742-597X.

Editor Reviewed Industry Articles [3]

- Maldovan, K. & **McCuen, T.**, *BIM Best Practices – A Rapid Fire Review of Industry Metrics and Trends*, Journal of Building Information Modeling, National Institute of Building Sciences, buildingSMART alliance, Spring 2010.
- Suermann, Major P. & **McCuen, T.**, *AIA-TAP BIM Repeat Award Winners: Strengths and Opportunities according to the NBIMS I-CMM*, Journal of Building Information Modeling, National Institute of Building Sciences, building SMART alliance, fall 2009.
- Molenaar, K., Gransberg, D., Sobin, N. & **McCuen, T.**, *Special Report: Achieving Sustainability through Integration*, Dateline: The Journal of the Design-Build Institute of America, Volume 16, Number 10, October 2009.

Double-Blind Peer Reviewed Conference Papers [42]

* Denotes Student

- Rahman, M. and **McCuen, T.**, *BIM and AI for Sustainable Built Environment: Current Status and Future Directions*, CIB World Building Congress 2025 Sustainable built environment – the role of the construction community in meeting The United Nation Sustainable Development Goals (UN SDGs), *submitted*
- Chavan, A., Ghosh, S., & **McCuen, T.**, *Use of Virtual Reality in Construction Higher Education in the US*, Associated Schools of Construction International, Proceedings of the 60th Annual International Conference, April 2024.
- Ghosh, S., *Mukherjee, N., & **McCuen, T.**, *Use of Visual Dashboards in Construction Projects*, Associated Schools of Construction International, Proceedings of the 60th Annual International Conference, April 2024.
- Mayo, G., **McCuen, T.** & Shelbourn, M., *BIM Data Handover from Construction to Operations*, Associated Schools of Construction International, Proceedings of the 59th Annual International Conference, April 2023.
- Rahman, M. & **McCuen, T.**, *Knowledge and Skills Required for NZEB Project Construction*, Associated Schools of Construction International, Proceedings of the 59th Annual International Conference, April 2023.
- *Najmi Sarooghi, E. & **McCuen, T.**, *Smart Cities' Strategies for Contractors: A Thematic Analysis of Selected Documents*, Associated Schools of Construction International, Proceedings of the 58th Annual International Conference, April 2022.
- **McCuen, T.**, Ghosh, S. & *Fasalojo, O., *Impact of COVID-19 on Construction Project Performance in the US*, Associated Schools of Construction International, Proceedings of the 58th Annual International Conference, April 2022.
- *Najmi Sarooghi, E. & **McCuen, T.**, *BIM-GIS: Analysis and Integration for Contractors*, Associated Schools of Construction International, Proceedings of the 57th Annual International Conference, April 2021. <https://doi.org/10.29007/vz55>
- *Najmi Sarooghi, E. & **McCuen, T.**, *BIM-GIS Integration and its Use for Construction and in the Development of Smart Buildings and Smart Cities*, Academic Interoperability Coalition, 14th BIM Academic Symposium, April 2021. <https://aicbimed.com/2021-symposium-virtual-1/>

- Mayo, G., **McCuen, T.**, Hannon, J., & Smith, D., *Development of the BIM Body of Knowledge (BOK) Task Definitions and KSAs for Academic Practice*, Associated Schools of Construction International, Proceedings of the 56th Annual International Conference, September 2020.
<https://doi.org/10.29007/mzxr>
- **McCuen, T.**, Gunderson, D., & *Rahman, M., *Current State of Construction Management Faculty Searches in the United States*, Best Conference Paper – Honorable Mention, Associated Schools of Construction International, Proceedings of the 55th Annual International Conference, Denver, Colorado, April 2019.
<http://ascpro0.ascweb.org/archives/cd/2019/paper/CEGT285002019.pdf>
- McCuen, T., *Application of the BIM BOK for the Development of a Construction Capstone Project*, Academic Interoperability Coalition 13th BIM Academic Symposium, November 2018,
https://dcp.ufl.edu/dcp/uploads/sites/43/2018/11/ProceedingsBIMAS2018a_2.pdf
- *Rahman, M. and **McCuen, T.**, *The Needed Skills in Teaching BIM and Sustainability in Higher Education Institutions*, Academic Interoperability Coalition 13th BIM Academic Symposium, November 2018,
https://dcp.ufl.edu/dcp/uploads/sites/43/2018/11/ProceedingsBIMAS2018a_2.pdf
- *Afkhamiaghada, M., *Mahdavi Parsa, A., Kereshmeh, A., and **McCuen, T.**, *Occupants Behavior-based Design Study Using BIM-GIS Integration: An Alternative Design Approach for Architects*, International Conference for Research and Innovation in Building and Construction, 35th CIB W78 - Information Technology in Design, Construction, and Management, Chicago, Illinois, October 2018.
- *Mahdavi Parsa, A. and **McCuen, T.**, *Comparison Between Current Methods of Indoor Network Analysis for Emergency Response through BIM/CAD-GIS Integration*, International Conference for Research and Innovation in Building and Construction, 35th CIB W78 - Information Technology in Design, Construction, and Management, Chicago, Illinois, October 2018.
- *Rahman, M. and **McCuen, T.**, *Net-Zero and BIM: The Current State and Future Needs*, Academic Interoperability Coalition 12th BIM Academic Symposium, Orlando, Florida, March 2018, <https://coremng.dcp.ufl.edu/bimededucation2018/AiCProceedings2018.pdf>
- McCuen, T., *Application of the BIM BOK for the Development of a Construction Capstone Project*, Academic Interoperability Coalition 13th BIM Academic Symposium, November 2018,
https://aicbimed.com/files/proceedingsbimas2018a_2.pdf
- Mayo, G., Wu, W., **McCuen, T.**, Issa, R., & Smith, D., *Implementation of the BIM Body of Knowledge (BOK) Framework for Program Planning in Academia*, Academic Interoperability Coalition 12th BIM Academic Symposium, Orlando, Florida, March 2018,
<https://aicbimed.com/files/aicproceedings2018.pdf>
- Mayo, G., Wu, W., **McCuen, T.**, Issa, R., & Smith, D., *The BIM Body of Knowledge (BOK) for Facilities Management*, International Facility Management Association (IFMA) Conference, Houston, Texas, October 2017.
- Wu, W., Mayo, G., Issa, R., **McCuen, T.**, & Smith, D., *Exploring the Body of Knowledge for Building Information Modeling Implementation using the Delphi Method*, International Workshop on Computing in Civil Engineering (IWCCE), Seattle, Washington, June 2017.

- **McCuen, T.** & Miller, K., *BIM Estimating in the Classroom*, Academic Interoperability Coalition 11th BIM Academic Symposium, Boston, Massachusetts, April 2017.
<https://aicbimed.com/files/2017aicproceedings-2.pdf>
- **McCuen, T.** & Pittenger, D., *Use of BIM for Asset Management in North American Airports*, Association for the Advancement of Cost Engineering International, Transactions of the 60th Annual Meeting, Toronto, Ontario, Canada, June 2016.
- **McCuen, T.** & Coetzee, M., *Lessons Learned: The Impact of Planning on Model Development and Model Management*, Academic Interoperability Coalition 10th BIM Academic Symposium, Orlando, Florida, April 2016. <https://aicbimed.com/files/bimas2016proceedings.compressed-2.pdf>
- **McCuen, T.** & Pober, E., *Process and Structure: Performance Impacts on Collaborative Interdisciplinary Team Experiences*, National Institute of Building Sciences 9th BIM Academic Symposium, Washington D.C., April 2015.
<https://aicbimed.com/files/bimas2015proceedings.pdf>
- *Kang, I., Ghosh, S. & **McCuen, T.**, *Performance of Design-Build Projects: Current State and Comparison between Project Characteristics*, Associated Schools of Construction International, Proceedings of the 51st Annual International Conference, College Station, Texas, April 2015.
- McCuen, T., *The Challenges of Advancing BIM in the Curriculum while Addressing Current Accreditation Standards for Construction*, National Institute of Building Sciences Building Innovation 2014 Conference, BIM Academic Workshop, Washington D.C., January 2014.
https://aicbimed.com/files/bi20140110_bsa_proceedings.pdf
- **McCuen, T.** & Ge, X., “*Visual Selves*”: *Construction Science Students’ Perceptions About Their Abilities to Represent Spatial Related Problems Internally and Externally*, International Association for Development of the Information Society, Cognition and Exploratory Learning in the Digital Age Conference, Fort Worth, Texas, October 2013.
- McCuen, T., *Validating a Quantity Takeoff Generated by a Building Information Model*, Association for the Advancement of Cost Engineering International, Transactions of the 57th Annual Meeting, Washington, DC, July 2013.
- **McCuen, T.** & Ge, X., *A Comparison of 2D and 3D Problem Representations in Science, Technology, Engineering, Mathematics (STEM) Disciplines*, 2013 American Educational Research Association, San Francisco, California, May 2013.
- **McCuen, T.** & Pober, E., *BIMStorm: A Platform Facilitating Integrated Design and Construction Processes*, National Institute of Building Sciences Building Innovation 2013 Conference, BIM Academic Workshop, Washington D.C., January 2013.
<https://aicbimed.com/2013-proceedings-washington-dc/>
- **McCuen, T.**, & Bredehoeft, P., *Cost Estimating in Building Information Modeling: Process Development Report*, Association for the Advancement of Cost Engineering International, Transactions of the 56th Annual Meeting, San Antonio, Texas, July 2012

- McCuen, T., *A Framework for the Design and Delivery of BIM Curriculum*, Proceedings of the BIM Academic Workshop, BIM Forum, buildingSMART alliance, Ecobuild, Washington D.C., December 2011.
https://aicbimed.com/files/2019-10-07_16_39_54_conferenceproceedings2011.pdf
- **McCuen, T.**, Speidel, E., & Liu, J., *BIM for Virtual Construction: A Collaboration of Three Universities*, Proceedings of the BIM Academic Workshop, BIM Forum, buildingSMART alliance, Ecobuild, Washington D.C., December 2011.
https://aicbimed.com/files/2019-10-07_16_39_54_conferenceproceedings2011.pdf
- McCuen, T., *BIM, Sustainable Construction, and Integrated Approaches to Project Delivery*, Association for the Advancement of Cost Engineering International, Transactions of the 55th Annual Meeting, Anaheim, California, July 2011.
- **McCuen, T.** & Lopez del Puerto, C., *Cost Savings Achieved through Changing Processes for Cost Estimating in Building Information Modeling*, Association for the Advancement of Cost Engineering International, Transactions of the 55th Annual Meeting, Anaheim, California, July 2011.
- **McCuen, T.** & Fithian, L., *Team Processes and Dynamics Demonstrated in Interdisciplinary BIM Teams*, Proceedings of the BIM-Related Academic Workshop, BIMForum, buildingSMART alliance, Ecobuild, Washington D.C., December 2010. <https://aicbimed.com/files/conference-proceedings.pdf>
- McCuen, T., *Underdeveloped and Underutilized: Cost Estimating in BIM*, 2010 Association for the Advancement of Cost Engineering International, Transactions of the 54th Annual Meeting, Atlanta, Georgia, June 2010.
- McCuen, T., *The Effect of Building Information Modeling on Conflict and Conflict Management in Interdisciplinary Teams*, Associated Schools of Construction, Proceedings of the 45th Annual Conference, Gainesville, Florida, April 2009
- Fithian, L. and **McCuen, T.**, *BIM and the Charrette: Technology and the Design Process - Results from the Interdisciplinary Course*, Association of Collegiate Schools of Architecture, Proceedings of the 97th Annual Conference, Portland, Oregon, March 2009.
- McCuen, T., *Building Information Modeling and the Interactive Capability Maturity Model*, Associated Schools of Construction International, Proceedings of the 44th Annual Conference, Auburn, Alabama, April 2008.
- **McCuen, T.** & Gransberg, D., *The Value of Building Sustainable Homes*, Royal Institute of Chartered Surveyors Conference on Construction Building Research, Atlanta, Georgia, September 2007.
- McCuen, T., *Industry Experience: An Important Requirement for Construction Faculty*, Associated Schools of Construction International Proceedings of the 43rd Annual Conference, Flagstaff, Arizona, April 2007.

Peer Review Conference Papers – Reprinted [2]

- **McCuen, T.**, Speidel, E., & Liu, J., *BIM for Virtual Construction: A Collaboration of Three Universities*, ARCHICREATION, Special Issue Selected Academic Articles 2010-2011 Ecobuild America, translated, China, ISSN 1004-8537, October 2012.
- **McCuen, T. & Fithian, L.**, *Team Processes and Dynamics Demonstrated in Interdisciplinary BIM Teams*, ARCHICREATION, Special Issue Selected Academic Articles 2010-2011 Ecobuild America, translated, China, ISSN 1004-8537, October 2012.

Conference Papers - Peer Reviewed Abstract [4]

- Wieters, K., Fithian, L., **McCuen, T.**, & Barrett C., *Teaching How to Manage Competing Interests: Planners, Architects and Construction Science Students Developing a Subdivision Together*, ACSP Conference. Association of Collegiate Schools of Planning Conference, Salt Lake City, November 2011.
- McCuen, T., *The Quantification Process and Standards for BIM: AACE International Task Force Project Development and Recommendations*, 2009 Association for the Advancement of Cost Engineering International, Transactions of the 53rd Annual Meeting, Seattle, Washington, June 2009.
- Suermann, P., Issa, R., **McCuen, T.**, Validation of the U.S. National Building Information Modeling Standard Interactive Capability Maturity Model, 12th International Conference on Computer in Civil and Building Engineering and 2008 International Conference on Information Technology in Construction, Beijing, China, October 2008.
- McCuen, T., *Scheduling, Estimating, and BIM: A Profitable Combination*, 2008 Association for the Advancement of Cost Engineering International, Transactions of the 52nd Annual Meeting, Toronto, Canada, June 2008.

Research and Technical Reports [4]

- Wu, W., Mayo, G., **McCuen, T.**, Issa, R., & Smith D., *The BIM Body of Knowledge (BOK): A Delphi Study*, Academic Interoperability Coalition, June 2017, <https://aicbimed.com/bim-bok-delphi-study/>
- **McCuen, T.**, and Pittenger, D., *Building Information Modeling for Airports*, ACRP Synthesis Report 70, Transportation Research Board, National Academies of Sciences, Engineering, and Medicine, May 2016, http://onlinepubs.trb.org/Onlinepubs/acrp/acrp_syn_070.pdf
- Gransberg, D., Korkmaz, S., McCuen, T., Molenaar, K., Riley, D., & Sobin, N., *Influence of Project Delivery on Sustainable, High Performance Buildings*, Charles Pankow Foundation and the Design-Build Institute of America, November 2010, <https://dbia.org/wp-content/uploads/2018/05/Research-Influence-on-Sustainable-High-Performance-Bldgs.pdf>
- Molenaar, K., Sobin, N., Gransberg, D., McCuen, T., Korkmaz, S., & Horman, M., *Sustainable, High Performance Projects and Project Delivery Methods*, A State of Practice Report, Design-Build Institute of America, September 2009, https://www.researchgate.net/publication/327976573_Sustainable_High_Performance_Projects_and_Project_Delivery_Methods_A_State-of-Practice_Report

Editor Reviewed Electronic Articles [9]

- McCuen, T., *The Common Element in Green Building and BIM*, Construction Project Controls and BIM report, Volume 6 – Number 10, October 2010.
<http://www.projectcontrols.com/articles/20101027?>
- McCuen, T., *A Collaborative Effort to Define the Quantity Takeoff Information Exchange for Use in Building Information Modeling*, Construction Project Controls and BIM Report, Volume 6 – Number 8, August 2010. <http://www.projectcontrols.com/articles/20100819?>
- McCuen, T., *BIM Implementation: Where is the Starting Point?* Construction Project Controls and BIM Report, Volume 6 – Number 6, June 2010.
http://www.projectcontrols.com/articles/20100624_1
- McCuen, T., *Software Options for Cost Estimating in BIM: A review of WinEstimator's DesignEst Pro and ITO*, Construction Project Controls and BIM Report, Volume 6 – Number 4, April 2010. http://www.projectcontrols.com/articles/20100422_1
Reposted by WinEst with permission at <http://www.winest.com/products/add-ons/default.aspx>
- McCuen, T., *Measuring BIM Maturity and Capability*, Construction Project Controls and BIM Report, Volume 6 – Number 2, February 2010.
<http://www.projectcontrols.com/articles/20100222/print>
- McCuen, T., *The National BIM Standard: Its Purpose, Projects, and Future*, Construction Project Controls and BIM Report, Volume 5 – Number 12, December 2009.
<http://www.projectcontrols.com/articles/20091222/print>
- McCuen, T., *Cost Estimating in BIM: The Fifth Dimension*, Construction Project Controls and BIM Report, Volume 5 – Number 10, October 2009.
http://www.projectcontrols.com/articles/20091016_1/print
- McCuen, T., *Current Trends in BIM Software: A Webinar Review*, Construction Project Controls and BIM Report, Volume 5 – Number 4, April 2009.
http://www.projectcontrols.com/articles/20090429_2/print
- **McCuen, T.**, and Suermann, Major P., P.E., *The Interactive Capability Maturity Model and 2007 AIA TAP BIM Award Winners*, Viewpoint #33, AECbytes, December 6, 2007.
http://www.aecbytes.com/viewpoint/2007/issue_33.html

Peer Reviewed Posters [3]

- **McCuen, T.** & Ge, X., *A Comparison of 2D and 3D Problem Representations in Science, Technology, Engineering, Mathematics (STEM) Disciplines*, 2013 American Educational Research Association, San Francisco, California, May 2013.
- **McCuen, T.**, and Eseryel, D., *Spatial Skills of Students Studying the Built Environment: Assessment and Instruction*, Associated Schools of Construction International, Proceedings of the 47th Annual Conference, Omaha, Nebraska, April 2011.
- **McCuen, T.**, and Eseryel, D., *Spatial Skills of Students Studying the Built Environment: Assessment and Instruction*, Research Day, Jeannine Rainbolt College of Education, University of Oklahoma, March 2011.

FUNDED GRANTS [14]

Funded Research Grants [\$3,240,000; my portion \$239,073]

- McCuen, T., *Workforce Training for People with Disabilities to Fill High Demand Positions in the Transportation and Highway Sector*, Southern Plains Transportation Center, \$19,073, February 2024 – August 2024.
- Zaman, M., Floyd, R., Molina, M., Mohaimin Sadri, A., Ashik Ali, S., McPherson, R., **McCuen, T. (co-PI)**, *Southern Plains Transportation Center: Regional UTC*, U.S. Department of Transportation, \$150,000 of \$3,000,000, 2023 - 2024.
- **McCuen, T.**, Pittenger, D., *Building Information Modeling (BIM) for Airports*, Airport Cooperative Research Program, National Academies of Sciences, Engineering, and Medicine, \$20,000 of 40,000, June 2015 – February 2016.
- Gransberg, D., Korkmaz, S., Molenaar, K., Riley, D., & Sobin, N., **McCuen, T.**, *Influence of Project Delivery Method on Achieving Sustainable, High Performance Buildings*, Charles Pankow Foundation, pass through funding with the University of Colorado, \$50,000 of \$200,000, 2008-2010.

Funded Academic Grants [\$187,302; my portion \$179,556]

- McCuen, T., *Advancing Student Awareness about Design-Build across the AEC Disciplines*, Design-Build Institute of America - Southwest Region, Faculty Grant, \$2,000, August 2022.
- McCuen, T., *BIM-Viz Lab*, \$135,000.00, Private Funding, Construction Science Advisory Board, spring 2016.
- McCuen, T., *BIM-Viz Lab*, University Construction Department Improvements Grant, TEXO Education and Research Foundation, \$6,000.00, March 2016
- McCuen, T., *i-Pads for the Construction Science Classroom*, University Construction Department Improvements Grant, TEXO Education and Research Foundation, \$5,000.00, February 2015.
- McCuen, T., *Design-Build Educator Workshop*, \$4,200.00, Design-Build Institute of America, August 2014.
- **McCuen, T. (co-PI)** and Pober, E., *What's Behind the Wall?: Augmented Reality for Contextualized Visualization*, College of Architecture Information Technology Committee, University of Oklahoma, \$7,746 of \$15,942.00, April 2013.
- McCuen, T., *Presidential International Travel Fellowship*, \$1,200.00. University of Oklahoma, April 2013.
- McCuen, T., Interuniversity BIM Project, \$5,460.00. JE Dunn Construction, award date October 2011.
- McCuen, T., *Business Processes and Team Dynamics in Building Information Modeling: Case Studies of an Integrated Team and a Specialized Team*, 2010-2012, Ed Cline Faculty Development Award, \$2,500.00, Ed Cline Faculty Development Award, University of Oklahoma, award date February 2010.

- McCuen, T., *Design and Implementation of BIM Across the OU Construction Science Curriculum*, Instructional Innovation Grant, \$10,000.00, Program for Instructional Innovation, University of Oklahoma, award date March 2007.

Research Project Proposal in Progress [1]

- McCuen, T., *Construction Coordination, Field Technologies, and Productivity*, summer 2023 – present.

Awards [7]

*Denotes student

- University of Oklahoma Provost's Award for Outstanding Faculty Service, April 2023.
- University of Oklahoma College of Architecture, Outstanding Service Award, September 2022.
- Associated Schools of Construction 55th Annual International Conference, Best Conference Paper – Honorable Mention, **McCuen, T.**, Gunderson, D., & *Rahman, M., Denver Colorado, April 2019.
- University of Oklahoma College of Architecture, Outstanding Service Award, September 2015.
- Association for the Advancement of Cost Engineering International, Outstanding Technical Subcommittee Chair, McCuen, T., May 2012.
- Association for the Advancement of Cost Engineering International, *Technical Excellence Award* recipient, project - BIM for Cost Estimating, McCuen, T., July 2009.
- American Institute of Architects, *AIA Fourth Annual Technology in Architecture Practice Building Information Modeling Award* recipient in the Academic Program or Curriculum Development category for BIM Intersession, an interdisciplinary course, **McCuen, T.**, & Fithian, L., May 2008.

Presentations – Invited - United States [21]

- Zaman, M., Royce, F. & **McCuen, T.**, *Overview of University of Oklahoma Led Regional University Transportation Center Workforce Development for Incarcerated and Disabled People*, HNTB, Oklahoma Department of Transportation, and Oklahoma Aeronautics Commission Strategy Session for the Advanced Air and Ground Mobility, June 2023.
- Zaman, M. Royce, F., Molena, M., McPherson, R, & **McCuen, T.**, *Overview of University of Oklahoma Led Regional University Transportation Center*, Committee Staff for U.S. House Appropriation Subcommittee on Transportation, Housing and Urban Development, and Related Agencies, May 2023.
- McCuen, T., *Design-Build: An Emerging Practice in the AECO Industry*, Structural Engineering Institute, University of Oklahoma, Norman, Oklahoma, October 2, 2019.
- McCuen, T., *An Innovative System for Surveillance and Cost Effective Maintenance*, Y-12 Operations and Research Group, Oak Ridge National Laboratory, Tennessee, October 2017.
- McCuen, T., *GIS: Building Information Modeling and its Adoption for Use on Airport Capital Programs – Case Studies and Methodologies*, Workshop 145, TRB 96th Annual Meeting, Washington DC, January 2017.

- Pittenger, D. & **McCuen, T.**, *BIM for Airports, ACRP Synthesis 70*, American Association of Airport Executives Airport Geospatial Technologies Conference, online recorded, June 2016.
- McCuen, T., *Information Exchange: Standardizing What & How Data is Shared Between Estimating & Other Stakeholders to Improve Workflow Efficiency*, Estimation Technology for Construction 2016 Conference, San Francisco, CA, May 2016.
- Pittenger, D. & **McCuen, T.**, *Building Information Modeling for Airports*, Aviation Geographic Information Systems and Data, Joint Subcommittee of AVO70, ABJ60, 95th Transportation Research Board, Annual Meeting, Washington DC, January 2016.
- Giel, B. & **McCuen, T.**, *Minimum BIM, 2nd Edition*, buildingSMART alliance Symposium, National Institute of Building Science Innovation 2014 Conference, Washington DC, January 2014.
- McCuen, T., *Future of the BIM Capability Maturity Model, Integrating BIM: Moving the Industry Forward*, buildingSMART alliance Symposium, National Institute of Building Science Innovation 2013 Conference, Washington DC, January 2013.
- **McCuen, T.**, and Pober, E., *Planning, Participating, and Reflecting on BIMStorm OKC as an Educational Experience*, Session S110, Ecobuild America 2012, Washington DC, December 2012.
- McCuen, T., *Cost Estimating in Building Information Modeling: A Report on the Process Development*, American Society of Professional Estimators, Chapter 79, Bentonville, Arkansas, October 2012.
- McCuen, T., *Project Delivery Methods and Impact on Sustainable Design Goals*, AIA 2011 National Convention and Design Exposition, Session PA303, New Orleans, Louisiana, May 2011.
- McCuen, T., *Building Information Modeling*, Greenwood Distinguished Lecture Series, Iowa State University, College of Engineering, Department of Civil, Construction and Environmental Engineering, Ames, Iowa, April 2011.
- Kutilek, F., **McCuen, T.**, Markkanen, S., and Taylor, S., *BIM in Cost Engineering*, Session S101, Ecobuild America, Washington DC, December 2009.
- McCuen, T., *BIM in Education: BIM for Constructors and BIM for Integrated Teams*, BIM Conference, U.S. General Services Administration, Fort Worth, Texas, November 2009.
- **McCuen, T.**, Suermann, Major P. C, and Lott, F.R, *Negotiating BIM Scope*, BIM Roadmap 2009, WPL Publishing, webinar, August 2009.
- McCuen, T., *BIM: Real Life Applications*, WinEstimator User Annual Conference, Seattle, Washington, March 2009.
- Hubbard, C. and **McCuen, T.**, *BIMStorm Project New Orleans*, AACE-I National BIM Committee, web meeting, October 2008.

- McCuen, T., Ecobuild America, buildingSMART alliance invited speaker, *Seminar S400: NBIMS: Future Considerations*, Anaheim, California, May, 2008.
- McCuen, T., *The BIM Team: A Presentation and Group Discussion About BIM and the Value Added to the Model in 4D and 5D*, Oklahoma Section of the Association for the Advancement of Cost Engineering International, Oklahoma City, October 2007.

Presentations – Invited - International [4]

- McCuen, T., Keynote, *Trends and Impacts of BIM Collaborations on the Built Environment and Society*, Real Smart Cities International Workshop, Dublin, Ireland, March 12, 2019.
- McCuen, T., Keynote, *BIM and High-Performance Building Construction*, Knowledge in Sustainable Construction Practice Research Group, Technological University Dublin, Ireland, March 13, 2019.
- Owen, J., Lopez del Puerto, C., **McCuen, T.**, and Stewart, C., *Strategies for Attracting and Retaining Women in Project Controls*, Association for the Advancement of Cost Engineering, online seminar, May 2014.
- **McCuen, T.**, and Bredehoeft, P., *Integration of Design, QTO, and Cost Estimating: Proposal for the U.S. National BIM Standard*, Cost Engineering Event, Total Cost Management: A World of Opportunities, Zuid-Holland, The Netherlands, April 2013

Presentations – Peer Reviewed Proposals [2]

- Fithian, L, and **McCuen, T.**, *BIMStorm OKC: A Virtual Event to Build Community and Enhance Connectivity*, American Institute of Architects FOREFRONT Conference, Salt Lake City, Utah, October 2013.
- McCuen, T. and Eseryel, D., *Spatial Skills to Support Complex Ill-Structured Problem Solving in Architecture, Engineering, and Construction Science*, Association for Educational Communications and Technology 2012 International Convention, October 2012.

Seminar and Workshop Presentations [8]

- McCuen, T., *DBIA Educator Workshop Implementation & Next Steps Panel*, Educator Workshop, virtual online, November 2022.
- McCuen, T., *DBIA Educator Panel*, DBIA Southwest Conference, virtual online, April 2021.
- McCuen, T., *DBIA Educator Workshop Implementation & Next Steps Panel*, Educator Workshop, virtual online, November 2020.
- McCuen, T., *Vendor Selection Workshop*, Estimation Technology for Construction 2016, Conference, San Francisco, CA, May 2016.
- Wu, W., Issa, R. & **McCuen, T.**, Smith, D., *BIM Job Task Analysis Review*, National Institute of Building Sciences 9th BIM Academic Symposium, Washington D.C., April 2015.
- **McCuen, T.**, and Fithian, L., *Studies and Outcomes from an Interdisciplinary Team Approach to Green BIM*, Research and Creative Activity Day, College of Architecture, University of Oklahoma, Norman, March 2011.

- McCuen, T., *BIM Capability Maturity Model Use*, buildingSMART alliance, National Institute of Building Sciences, Washington DC, May 2010.
- McCuen, T., *BIM Best Practices and Metrics Follow-Up*, Session W203, Ecobuild America, Washington DC, December 2009.
- **McCuen, T.**, and Fithian, L., *BIM in Education*, Higher Education Transformation, Session W102, Ecobuild America, Washington DC, December 2009.
- Fithian, L., and **McCuen, T.**, *BIM + (Architect + Contractor) = (Environment + Economics) an Interdisciplinary Course*, Technology in Architecture Practice, American Institute of Architects, pre-convention conference, Boston, Massachusetts, May 2008.

AEC Continuing Education Instructor [15]

- McCuen, T., *Developing Technical Input of Design-Build RFPs*, Gransberg & Associates for American Society of Civil Engineers, United States Fish & Wildlife Service, online, July 1, 2020 (4 hours).
- McCuen, T., *Scoping Design-Build Projects*, Gransberg & Associates for American Society of Civil Engineers, United States Fish & Wildlife Service, online, June 15 – 19, 2020 (total 16 hours).
- McCuen, T., *BIM Beyond Visualization: Organization Level BIM Adoption, Implementation, and Essential Personnel Competencies*, American Society of Civil Engineers, COFICO in Vietnam, online, June 14, 2018.
- McCuen, T., *BIM Beyond Visualization: Modeling and Information Requirements to Map the Information Exchange*, American Society of Civil Engineers, COFICO in Vietnam, online, May 31, 2018.
- McCuen, T., *BIM Beyond Visualization: Project Level BIM Process Definition and Implementation*, American Society of Civil Engineers, COFICO in Vietnam, online, May 17, 2018.
- McCuen, T., *BIM Beyond Visualization: Project Level BIM Use Purposes and Goals*, American Society of Civil Engineers, COFICO in Vietnam, online, May 3, 2018.
- McCuen, T., *BIM Beyond Visualization: BIM Use Characteristics, Classification, and Structure*, American Society of Civil Engineers, COFICO in Vietnam, online, April 12, 2018.
- McCuen, T., *BIM Beyond Visualization: Project Level BIM Uses*, American Society of Civil Engineers, COFICO in Vietnam, online, March 29, 2018.
- McCuen, T., *BIM Beyond Visualization: The Value of BIM*, American Society of Civil Engineers, COFICO in Vietnam, online, March 15, 2018.
- McCuen, T., *BIM Beyond Visualization: Overview, Trends and Issues*, American Society of Civil Engineers, COFICO Vietnam, online, March 1, 2018.
- McCuen, T., *Green Building Design and Construction: Principles and Strategies*, Institute for Design Professionals, Syracuse, New York, May 2010.

- McCuen, T., *Green Building Design and Construction: Principles and Strategies*, Institute for Design Professionals, Buffalo, New York, May 2010.
- McCuen, T., *Building Information Modeling: A New Approach for the Building Design and Construction Industry*, Institute for Design Professionals, Albany, New York, September 2009.
- McCuen, T., *Building Information Modeling: A New Approach for the Building Design and Construction Industry*, Institute for Design Professionals, Buffalo, New York, March 2009.
- McCuen, T., *Building Information Modeling: A New Approach for the Building Design and Construction Industry*, Institute for Design Professionals, New York, New York, March 2009.

Unfunded Research Proposals – Internal – University of Oklahoma [7]

- Hill, J., Bigelow, B., Person, A., **McCuen, T.**, Bishop, C., Reed, B., Hodgson, S., Wyatt, K., & Stewart, J., *Saving Slave Houses: Preserving Immersive Experiences of Slave Houses and Their Histories*, Institute for Community and Society Transformation, University of Oklahoma, \$30,000, May 15, 2022.
- McCuen, T. and Lowery, B., *The Influence of Public-Private-Partnerships on Community Response to Crisis*, Vice President of Research, University of Oklahoma, \$26,781 of \$48,035, May 2020 – October 2020, April 6, 2020.
- Siddique, Z., Fithian, L., Neeman, H., Radhakrishnan, S., and **McCuen, T.**, *Acquisition of an Immersive Virtual Environment to Foster Complex System Research and Education at the University of Oklahoma*, NSF Major Research Instrumentation (MRI) program, University of Oklahoma Center for Research Program Development and Enrichment, internal competition, October 2011.
- Eseryel, D., **McCuen, T.**, and Pober, E., *Developing Adaptive Expertise and Visual Reasoning Skills for Effective Complex Problem Solving in the Built Environment Disciplines*, Challenge Grant Program, University of Oklahoma, May 2011.
- **McCuen, T.** and Fithian, L., *SAIC BIM Lab*, University of Oklahoma College of Architecture, internal proposal, March 2012.
- McCuen, T.L., *BIM Design Model Impacts on Accuracy and Reliability of Work Sequencing and Cost Estimating*, Junior Faculty Research Program, University of Oklahoma, January 2010.
- McCuen, T., *Building Information Modeling Hardware and Software*, Research Council, University of Oklahoma, summer 2007.

Unfunded Research Proposals – External - United States [24]

- Hill, J., Bigelow, B., Person, A., **McCuen, T. (co-PI)**, Murphy, F., Thibodeaux, J., & Stewart, J., *Making Slave House Database (SHD) Widely Accessible and Increasing its Depth: A Pilot Test Using Three Virginia Sites*, Humanities Collections and Reference Resources, National Endowment for the Humanities, \$2,859 of \$72,769, submitted July 2022.
- Hill, J., Bigelow, B., Person, A., **McCuen, T.**, Bishop, C., Reed, B., Hodgson, S., Wyatt, K., & Stewart, J., *Saving Slave Houses: Preserving Immersive Experiences of Slave Houses and Their Histories*, National Endowment of the Humanities, \$45,000 of \$420,495, submitted January 2021.

- Phy, J., Borchers, V., **McCuen, T.**, Agnew, R., Sims, N., Linstrum, R., & Parenzan, P., *Asset Information Handover Guidelines: From Planning and Construction to O&M*, Airport Cooperative Research Program, National Academies of Sciences, Engineering, and Medicine, \$30,000 of \$299,990, submitted April 2021.
- Mayo, G. and **McCuen, T.**, *Technological Capabilities of DOTs for Digital Project Management and Delivery*, sponsored by Cooperative Highway Research Program, National Academies of Sciences, Engineering, and Medicine, \$20,000 of \$40,000, submitted August 2020.
- McCuen, T., Ge, X., Grant, C., Weaver, C., & Porterfield, C., *Virtual Reality with Embedded Scaffolding to Accelerate the Development of Expertise in Forensic Science*, NSF Cyberlearning at the Human-Technology Frontier, \$253,284 of \$723,668, submitted January 13, 2020. PI.
- Gransberg, D., **McCuen, T.**, Molenaar, K., & Touran, A., *Selecting, Procuring, and Implementing Airport Capital Project Delivery Methods*, Airport Cooperative Research Program, Transportation, Research Board, \$60,000 of \$450,000, May 2020 – August 2021, submitted February 18, 2020.
- Gransberg, D., **McCuen, T.**, Tighe, S., & Jeong, H., *Lifecycle BIM for Infrastructure: A Business Case for Project Delivery and Asset Management*, National Cooperative Highway Research Program, Transportation Research Board, \$65,500 of \$499,978, April 2020 – July 2021, submitted January 7, 2020.
- Bell, P., Maier, F., Hixon, C., Andersson, L., **McCuen, T.**, & Goodrum, P., *BIM for Infrastructure: A Business Case for Project Delivery and Asset Management*, National Cooperative Highway Research Program, Transportation Research Board, \$58,115 of \$499,989, April 2020 – July 2021, submitted January 7, 2020.
- Wu, W., Dossick, C., & **McCuen, T.**, *How Communities of Practice Support Teaching & Learning When Industry Practices Rapidly Change*, NSF Collaborative Research: Institutional & Community Transformation, \$39,858 of \$300,000, January 2020 – December 2022, submitted June 2019. Co-PI.
- **McCuen, T.** and Mayo, G., *Benefits of Arts to Airports and Stakeholders*, Synthesis 11-03/Topic S01-21, Airport Cooperative Research Program, National Academies of Sciences, Engineering, and Medicine, \$22,500 of \$45,000, October 2019 – July 2020, submitted May 2019.
- **McCuen, T.** and Moser, R., *Current Practice of Airport Renewable Energy Projects*, Synthesis 11-03/Topic S02-21, Airport Cooperative Research Program, National Academies of Sciences, Engineering, and Medicine, \$22,500 of \$45,000, October 2019 – July 2020, submitted May 2019.
- **McCuen, T.** and Mayo, G., *Training Programs for Airport Operations Personnel*, Synthesis 11-03/Topic S10-16, Airport Cooperative Research Program, National Academies of Sciences, Engineering, and Medicine, \$22,500 of \$45,000, October 2019 – July 2020, submitted May 2019.
- **McCuen, T.**, Mayo, G., & Stafford, E., “Gap Analysis for Frequently Selected Energy Compliance Paths Relative to Other Available Compliance Paths”, FOA Number: DE-FOA-0001824, Office of Energy Efficiency and Renewable Energy (EERE), Department of Energy (DOE), 317,00 of \$576,729, submitted June 2018.

- **McCuen, T.**, Pittenger, D., & Gransberg, D., *BIM Beyond Design*, Airport Cooperative Research Program, Transportation Research Board, January 2017.
- **McCuen, T.**, Issa, R., & Wu, W. *A Case for BIM Use: 3D Coordination in Preconstruction Planning and Project Execution*, Associated General Contractors Education and Research Foundation, October 2016.
- Fithian, L., **McCuen, T.**, Cricchio, A., & Pober, E., *C5 – Collaborate, Create, Construct, Capstone, Charette*, National Council of Architectural Registration Boards (NCARB) Award for the Integration of Practice and Education, September 2014.
- Ghosh, S., **McCuen, T.**, Fithian, L., & Cricchio, A., *Systems Improvement of Project Lifecycle Using Emerging Tools*, Architecture + Construction Alliance, September 2014.
- **McCuen, T.**, Pober, E., & Cricchio, A., *C5- Collaborate, Create, Construct, Charette, Capstone*, Collaborative Teaching/Learning for Architecture and Building Construction, Architecture + Construction Alliance, November 2013.
- Reyes, M., Holliday, L., & **McCuen, T.**, *General Education Elective: Residential Construction for Non-Majors*, National Housing Endowment, Homebuilding Education Leadership Program, June 2013.
- Graham, C., Fithian, L., **McCuen, T.**, and Asojo, A., *Continuing Education and Outreach Program for Green Building and Sustainability*, State Energy Program ARRA Funding, April 2009.
- Gransberg, D., **McCuen, T.**, and Scheepbouwer E., *Price Indexing in Transportation Construction Contracts*, National Cooperative Highway Research Program, National Academies Transportation Research Board, April 2009.
- McCuen, T., National Housing Endowment, *Homebuilding Education Leadership Program*, April 2009.
- **McCuen, T.** and Fithian, L., *Project to Create a Program Curriculum Explaining the Contractor’s Role in the Construction of a Project Intended to Receive Certification Under the LEED Green Building Rating System*, Associated General Contractors of America, September 2007.
- Fithian, L., Gransberg, D., and **McCuen, T.**, *Airport Cooperative Research Program Synthesis S02-02, Sustainable Facilities and Practices*, spring 2007

Unfunded Grants – International [1]

- Comiskey, D., McKane, M., Nicholl, P., McComish, L, Wing, S. (co-principal investigators), **McCuen, T.**(advisor), *Built Environment Information Modeling (BEIM) Studio – Fostering Collaboration within AEC Education*, The Higher Education Academy’s Teaching Development Grant, University of Ulster, Northern Ireland, January 2014.

Research in Progress [5]

- **McCuen, T.**, Wu, W., Issa, R. & Smith, D., *BIM Body of Knowledge (BOK) 2nd Edition*, spring 2023 – present.

- **McCuen, T.** & Gunderson, D., *Current State of Construction Management Faculty Searches in the United States: A Longitudinal Study*, spring 2023 – present.
- **McCuen, T.** and Shelbourn, M., *BIM Handover Requirements in the Context of Smart Cities*, spring 2022 - present.
- **McCuen, T.**, Bigelow, B., Ghosh, S., & Reyes, M., *Leveraging Incarcerated and Paroled Non-Violent Offenders to Meet the Construction Workforce Shortage*, March 2021 – present.
- **McCuen, T.**, Ge, X., Grant, C., & Weaver, C., *Virtual Reality with Embedded Scaffolding to Accelerate Expertise*, August 2019 – present.

Research Group Activities [2]

- Education and Learning in the Built Environment Research Group, team member, Centre for Urban Processes, Resilient Infrastructures & Sustainable (Built) Environments (UPRISE), University of Salford, United Kingdom, spring, 2018 - present.
<https://www.salford.ac.uk/research/uprise/research-groups/education-and-learning-in-the-built-environment-research-group>
- Knowledge in Sustainable Construction Practice Research Group, Sustainable Digitization Group Leader, College of Engineering and Built Environment, TU Dublin, Ireland, spring 2019 – present. <https://www.sustainabilityresearchgroup.com/>

Other Research and Creative Activities [11]

- **McCuen, T.**, Mayo, G., Hannon, J., & Smith, D., *BIM Body of Knowledge, Validation – Knowledge, Skills and Abilities*, spring 20019 – spring 2020.
- **McCuen, T.**, Mayo, G., Wu, W., Issa, R., & Smith, D., *BIM Body of Knowledge Task Definitions*, fall 2017 – fall 2018.
- Wu, W., Mayo, G., **McCuen, T.**, Issa, R., & Smith, D., *Body of Knowledge in BIM Implementation*, summer 2015 – 2017.
- Wu, W., Issa, R., & **McCuen, T.**, *Investigation of the Knowledge, Skills, and Abilities Needed for BIM positions*. 2014 – 2017.
- buildingSMART alliance, Project Chair, *Quantity Takeoff Information Exchange*. A project aimed at reducing waste in three types of problems encountered on a daily basis by cost estimators and other members of the project team. 2014 – 2017.
- buildingSMART alliance, Project Chair, *Interactive Capability Maturity Model*. A project to refine and advance the Interactive Capability Maturity Model as a metric for evaluation a BIM's capabilities and its maturity level as a source of integrated project information, 2010 – 2015.
- buildingSMART alliance, Task Team Leader, *Level of Detail for Estimating in BIM*. A collaborative project with the Association for the Advancement of Cost Engineers, Americans Society of Professional Estimators, and the Royal Institute of Chartered Surveyors, spring 2010 – 2014.

- *BIM Standards for Cost Estimating*, AACE-International and National BIM Standard, Quantification Process and Standards for BIM, primary team participant creating process flow, information exchange requirements, and information delivery manual in BIM, spring 2008 – 2014.
- *OmniClass Research in Revit*, collaboration with Seattle based architect to identify and apply OmniClass structure to standard Revit organization of BIM specs for software development. Principal investigator with one graduate student volunteer participant, spring 2008.
- *National BIM Standard Consensus Process*, creating a process with policies and procedures for standard candidate submissions to the national body of AEC BIM professionals, spring 2008 - 2009.
- *AECOO-1 Testbed*, observer, Open Geospatial Consortium and buildingSMART alliance, summer 2008.
- *BIMStorm New Orleans*, collaboration with Seattle based interdisciplinary team of architects and engineers for the design and rebuilding of a school campus damaged by Katrina. Construction team leader responsible for coordinating task contributions of two graduate student volunteer participants. Virtual teaming via web based Building Information Modeling, spring 2008.

Academic Development Workshops and Other Academic Activities

- *Introduction to Sponsors Training*, OU Office of Research Services, June, 11, 2022.
- *Coaching Graduate Students to Completion*, University of Oklahoma Graduate College, spring 2021.
- *Best Practices of Online Teaching During the Pandemic*, Associated Schools of Construction, November 16, 2020.
- *FAA Center of Excellence for Technical Training & Human Performance Year 4 Technical Virtual Meeting*, May 26, 2020.
- *Unlearning Trans and Homonegativity*, Diversity Ally Training, University of Oklahoma, April 14, 2020.
- *Unlearning Classism*, Diversity Ally Training, University of Oklahoma, October 23, 2019.
- *Unlearning Ableism*, Diversity Ally Training, University of Oklahoma, October 17, 2019.
- *Unlearning Sexism*, Diversity Ally Training, University of Oklahoma, August 28, 2019.
- *Unlearning Racism*, Diversity Ally Training, University of Oklahoma, May 21, 2019.
- *Voice and Voices Series: Addressing Microaggressions to Instructors*, University of Oklahoma Center for Teaching Excellence, October 2018.
- *Navigating the NSF Proposal Submission Process*, University of Oklahoma CRPDE and VPR ORS, September 2018.

- *The 2018 – Year of the Scientific Writer*, Symposium, University of Oklahoma Writing Center, April 2018.
- *Writing Multiple-Choice Questions to Assess Higher-Order Thinking*, University of Oklahoma Office of Academic Assessment, March 2018.
- Building a Proposal Budget, Seminar, OU CRPDE, November 2017.
- NSF EAGER, Seminar, OU CRPDE, October 2017.
- NSF RAPID Program Information, Seminar, October 2017.
- BIM Summit, coordinator, University of Oklahoma College of Architecture, September 2016.
- Immersive Visualization Bootcamp, University of Arkansas – Little Rock, fall 2014.
- Spatial Intelligence Research Group, University of Oklahoma, fall 2013 – 2014.
- Creativity World Forum, Oklahoma City, Oklahoma, November 2010.
- Eighth Annual Colloquium of the Teaching Scholars Initiative, University of Oklahoma, November 2010
- Resources for Scholarship and Funding in the Arts, Architecture, and Humanities Workshop, Center for Research Program Development and Enrichment, University of Oklahoma, September 2010.
- The Teaching Professor Conference, Cambridge, Massachusetts, May 2010.
- Tekla for Construction Management Training, Custom Online, spring 2010.
- Interdisciplinary Green Neighborhood Development and Modern Green Housing Project, Residential Production Construction (CNS4863/5970) and Architecture Graduate Studio II (ARCH6256), spring 2010.
- Course planning and curriculum development for Interdisciplinary BIM Course with College of Engineering Technology, Ferris State University, spring 2010.
- NSF Grants Workshop, Oklahoma EPSCoR, Oklahoma State University, May 2009.
- BIM Workshop Associated Schools of Construction International Proceedings of the 45th Annual Conference, University of Florida, Florida, April 2009.
- BIM Workshop, Associated Schools of Construction International Proceedings of the 44th Annual Conference, Auburn, Alabama, April 2008.
- Faculty Workshop, Blended/Hybrid Courses, Program for Instructional Innovation, University of Oklahoma, spring 2008.
- Presentation to the New Faculty Seminar, Program for Instructional Innovation, University of Oklahoma, fall 2007.

- Primavera P6 Training, Philadelphia, Pennsylvania, summer 2007.
- WinEstimator Training, Seattle, Washington, summer 2007.
- Autodesk Revit Training, San Antonio, Texas, spring 2007.
- Peer Review Committee member, American Society of Engineering, Education, spring 2007.
- LEED Workshop, Associated Schools of Construction International Proceedings of the 43rd Annual Conference, Flagstaff, Arizona, April 2007.
- Infusing Research/Service Learning Workshop, Program for Instructional Innovation, University of Oklahoma, spring 2007.
- Faculty Workshop on Service Learning, Participant, Southeastern Oklahoma State University, fall 2006.
- Faculty Workshop on Service Learning, Participant, University of Oklahoma, fall 2006.

Professional Conferences, Seminars, Workshops Attended

- 59th Annual Associated Schools of Construction International Conference, Liverpool, United Kingdom, April 2 – 23, 2023.
- American Council for Construction Education Construction Workforce Education Visiting Team member training, July 2023.
- American Council for Construction Education Committee Chair Training Workshop, Irving, Texas, February, 2023.
- American Council for Construction Education Masters Degree Visiting Team Training Workshop, Irving, Texas, February, 2023.
- American Council for Construction Education Accreditation Chair Training Workshop, Minneapolis, Minnesota, July, 2022.
- 58th Annual Associated Schools of Construction International Conference, Atlanta, Georgia, April 20 – 23, 2022.
- Design-Build Institute of America, Southwest Region Conference, Oklahoma City, Oklahoma, May 2022.
- Design-Build Institute of America, National Conference, Denver, Colorado, November 2021.
- Associated Schools of Construction Region V Meeting and TEXO Building Knowledge Conference, October 8, 2021.
- 57th Annual Associated Schools of Construction International Conference, virtual, April 5 – 9, 2021.
- 14th Annual BIM Academic Symposium, Academic Interoperability Coalition, virtual, March 22 – 23, 2021.

- Associated Schools of Construction Region V Meeting and TEXO Building Knowledge Virtual Conference, November 4, 2020.
- Associated Schools of Construction Region 5 Meeting and 2020 TEXO Building Knowledge Virtual Conference, online, October 2, 2020.
- Design-Build Institute of America, National Conference, Las Vegas, Nevada, November 2019.
- Associated Schools of Construction Region 5 Meeting and 2019 TEXO Building Knowledge Conference, Dallas, Texas, October 3 - 4, 2019.
- Applied Research Associates (ARA), *BIM for Infrastructure: Advanced Methods for Planning, Developing and Maintaining the Transportation System*, 1.0 PDH, online, June 19, 2019.
- 55th Annual Associated Schools of Construction International Conference, Denver, Colorado, April 10 – 13, 2019.
- Autodesk University, Las Vegas, Nevada, November 2018.
- 13th BIM Academic Symposium, Academic Interoperability Coalition, Las Vegas, Nevada, November 11 – 12, 2018.
- 12th BIM Academic Symposium, Academic Interoperability Coalition, Kissimmee, Florida, March 26 – 27, 2018.
- OK-WISE Conference 2018, Oklahoma City, Oklahoma, September 2018.
- Design-Build Institute of America, Southwest Region Conference, Houston, Texas, April 2018.
- 11th BIM Academic Symposium, Academic Interoperability Coalition, Boston, Massachusetts, April 2017.
- Design-Build Institute of America, National Conference, Philadelphia, Pennsylvania, November 2017.
- Design-Build Institute of America, Southwest Region Conference, Dallas, Texas, April 2017.
- Design-Build Institute of America, National Conference, Las Vegas, Nevada, November 2016.
- Association for the Advancement of Cost Engineering International, 59th Annual Meeting, Toronto, Canada, June 2016.
- 10th BIM Academic Symposium, Academic Interoperability Coalition, Orlando, Florida, April 2016.
- Design-Build Institute of America, National Conference, Denver, Colorado, November 2015.
- Association for the Advancement of Cost Engineering International, 59th Annual Meeting, Las Vegas, Nevada, June 2015.
- Design-Build Institute of America, Southwest Region Conference, San Antonio, Texas, April 2015.

- 9th BIM Academic Symposium, Academic Interoperability Coalition, Washington DC, April 2015.
- Design-Build Institute of America, National Conference, Dallas, Texas, November 2014.
- buildingSMART alliance Memorandum of Agreement Workshop, National Institute of Building Science Innovation Conference, Washington DC, January 2014.
- 8th BIM Academic Symposium, AEC-ST, Washington DC, January 2014.
- Autodesk University, Las Vegas, Nevada, December 2013.
- Association for the Advancement of Cost Engineering International, 57th Annual Meeting, Washington DC, July 2013.
- National Institute of Building Sciences, buildingSMART alliance, Washington D.C., January 2013.
- 7th BIM Academic Symposium, AEC-ST, Washington DC, January 2013.
- Association for the Advancement of Cost Engineering International, 56th Annual Meeting, San Antonio, Texas, July 2012.
- Ecobuild America, National BIM Conference, buildingSMART alliance Conference, Washington DC, December 2011.
- 6th BIM Academic Symposium, AEC-ST, Washington DC, December 2011.
- Association for the Advancement of Cost Engineering International, 55th Annual Meeting, Anaheim, California, June 2011.
- Ecobuild America, National BIM Conference, buildingSMART alliance Conference, Washington DC, December 2010.
- 5th BIM Academic Symposium, AEC-ST, Washington DC, December 2010.
- Ecobuild America, National BIM Conference, buildingSMART alliance Conference, Washington DC, December 2009.
- Association for the Advancement of Cost Engineering International, 53rd Annual Meeting, Seattle, Washington, June 2009.
- Association for the Advancement of Cost Engineering International, 52nd Annual Meeting, Toronto, Canada, June 2008.
- Ecobuild America, AEC-ST spring, buildingSMART alliance National Conference, National BIM Standard, Anaheim, California, May 2008.
- Ecobuild America, AEC-ST fall, buildingSMART alliance National Conference, National BIM Standard, Washington D.C., December 2007.

University/College/Division Service – Mentorship

- Junior Faculty Mentor, Natalie Ellis, Interior Design, spring 2018 – summer 2019.

- Junior Faculty Mentor, Suchi Bhattacharjee, Interior Design, fall 2016 – spring 2019.
- Junior Faculty Mentor, Somik Gosh, Construction Science, fall 2013 – spring 2019.

University/College/Division Service – Leadership

- Ranked Renewable Term Faculty Search Committee, Chair, Construction Science Division, May 2023 – December 2023.
- Tenured/tenure Track Faculty Search Committee, Chair, Construction Science Division, May 2023 – December 2023.
- Study Abroad Liaison, College of Architecture, fall 2023 – present.
- Travel Study Programs Committee, Chair, College of Architecture, fall 2023 – present.
- Environmental Concerns Committee, Chair, University of Oklahoma, fall 2020 – spring 2021.
- Environmental Concerns Committee, Secretary, University of Oklahoma, fall 2019 – spring 2020.
- bimSMART Foundation Summit, Coordinator, College of Architecture, October 2016.
- College of Architecture BIM + Viz Lab, Director, University of Oklahoma, spring 2015 – present.
- Haskell & Irene Lemon Construction Science Division, Interim Director, fall 2015 – summer 2016.
- Haskell & Irene Lemon Construction Science Division, Interim Associate Director, spring 2015 – summer 2015.
- Synchro Workshop Coordinator, Construction Science Division, fall 2013.
- I-Cubed Group Liaison, College of Architecture, University of Oklahoma, spring 2011 – 2013.
- Information Technology Committee, College of Architecture, Chair, January 2011 – spring 2012.
- BIM Lecture Series, Construction Science Division, Coordinator, fall 2010.
- University Information Technology Council, Chair, fall 2009 – spring 2010.
- Information Technology Committee, College of Architecture, Secretary, fall 2008 – spring 2009.
- Scholarship Liaison, Construction Science Division, fall 2006 – spring 2010.

University/College/Division Service

- Ad Hoc Committee for T&P, PPT, & Third Year review, College of Architecture, fall 2023 – present.
- Provost Landscape Architecture Discontinuance Taskforce, University of Oklahoma, fall 2023.
- Committee A, College of Architecture, fall 2022 – present.

- Travel Study Programs Committee, member, College of Architecture, fall 2021 – present.
- PhD Committee, member, College of Architecture, fall 2020 – present.
- Faculty Senate Advisory Committee to the Vice President of Research and Partnerships, fall 2021.
- Environmental Concerns Committee, University of Oklahoma, fall 2018 – spring 2021.
- Vice-President for University Operations Search Committee, University of Oklahoma, fall 2018.
- Faculty Diversity, Equity, and Inclusion Committee, University of Oklahoma, fall 2018 – spring 2021.
- Faculty Appeals Committee, University of Oklahoma, fall 2018 – spring 2022.
- Campus Tenure Committee, University of Oklahoma, fall 2018 – spring 2019.
- College of Architecture IT Committee, fall 2017 – present.
- Oklahoma EPSCoR Women in Science Conference, Tulsa, Oklahoma, October, 2017.
- Committee A member, College of Architecture Committee A, fall 2016 – spring 2017.
- OU Innovation Prize Committee, University of Oklahoma, summer 2016.
- STEM Leadership Conference, Gordon Cooper Technology Center, Shawnee, Oklahoma, January 2015.
- Innovation Hub Visualization Committee, University of Oklahoma, fall 2014 – fall 2016.
- Innovation Hub Fabrication Lab Committee, University of Oklahoma, fall 2014 – fall 2016.
- Undergraduate Student Marshal, University of Oklahoma Commencement and College of Architecture Convocation, May 2014.
- Construction Science program videos, Project Manager, fall 2013 – fall 2014.
- Information Technology Committee chair, College of Architecture, fall 2014 – spring 2015.
- Faculty Search Committee member, Construction Science, spring 2014.
- American Council for Construction Education, Construction Science representative, fall 2013 – present.
- Faculty Search Committee member, Interior Design, spring 2013.
- Undergraduate Student Marshal, University of Oklahoma Commencement and College of Architecture Convocation, May 2013.
- Research and Graduate Curriculum Committee, College of Architecture, spring 2013 – fall 2015.

- Committee A member, College of Architecture Committee A, fall 2012 – 2015.
- Research Liaison, College of Architecture, University of Oklahoma, fall 2012 – present.
- Provost Advisory Committee on Classrooms, University of Oklahoma, member, fall 2010 – spring 2011.
- Coordinator, Technology for Construction Seminar, Norman, Oklahoma, February 2010.
- University Information Technology Council, member, fall 2008 – spring 2012.
- University of Oklahoma OUTREACH, Pre-collegiate Programs, Horizons Unlimited, College of Architecture, Instructor, summer 2009.
- Information Technology Committee, College of Architecture, Construction Science Division, member fall 2008 – spring 2015.
- Scholarship Selection Committee Member, Pat Eidson Scholarship, Interior Design Division, College of Architecture, spring 2007.

Other Academic Service – Leadership

- Associated Schools of Construction, 1st Vice President, spring 2024 – present.
- American Council for Construction Education, State Fair Community College Accreditation Team Chair, February 2024 – present.
- International Journal of Building Pathology and Adaptation, Editorial Advisory Board, spring 2023 – present. ISSN: 2398-4708
- American Council for Construction Education, Collin College Accreditation Team Chair, August 2022 – August 2023.
- International Journal of Construction Education and Research, Editorial Board, spring 2022 – present. ISSN: 15503984
- Associated Schools of Construction, 2nd Vice President, spring 2022 – spring 2024.
- American Council for Construction Education, Guidance Committee Vice Chair, spring 2022 – present.
- Associated Schools of Construction, Secretary, spring 2020 – spring 2022.
- Academic Interoperability Coalition, 14th BIM Academic Symposium, Conference Coordinator, University of Oklahoma, spring 2019 – spring 2020.
- American Council for Construction Education, Board of Trustees, Member, summer 2019 – present.
- Associated Schools of Construction, Region 5, Associate Director, fall 2014 – fall 2016.
- Academic Interoperability Coalition, Secretary, spring 2014 – fall 2021.

- Academic Interoperability Coalition, Founder and Steering Committee member, spring 2014 – present

Other Academic Service

- External Reviewer, Promotion candidate, McWhorter School of Building Science, College of Architecture, Design, and Construction, Auburn University, summer 2023.
- External Reviewer, Promotion candidate, Department of Construction Management, College of Engineering, Boise State University, summer 2023.
- External Reviewer, Tenure and Promotion candidate, Department of Construction Management, College of Architecture and Construction Management, Kennesaw State University, summer 2023.
- American Council for Construction Education, Mentor to candidate program –Stephen F. Austin University, summer 2022- spring 2023.
- Airport Cooperative Research Program 11-04 Graduate Research Award Program on Public-Sector Aviation Issues, Mentor to Xiaofan Liang (Georgia Tech University), *Toward an Inclusive Aerotropolis: Critical Connectivity around Atlanta Airport*, August 2022 – present.
- External Reviewer, Tenure and Promotion candidate, Construction Management, Civil and Architectural Engineering and Construction Management, University of Wyoming, September 2022.
- American Council for Construction Education, Diversity, Equity, and Inclusion Task Force, summer 2022 – present.
- Operation and Maintenance Panel Member, Airport Cooperative Research Program University Design Competition for Addressing Airport Needs, Virginia Space Grant Consortium, May 2022.
- Airport Cooperative Research Program 11-04 Graduate Research Award Program on Public-Sector Aviation Issues, Mentor to Michael Ammoury (Syracuse University), *Incorporating Smart Building Technologies into an Airport Management Framework to Improve Sustainability and Resilience*, August 2021 – May 2022.
- Airport Cooperative Research Program 11-04 Graduate Research Award Program on Public-Sector Aviation Issues, Mentor to Parisa Sanaei (Syracuse University), *Incorporating Photogrammetry & Laser Scanning Technologies into Runway Inspection Procedures*, August 2021 – May 2022.
- External Reviewer, Promotion candidate, Engineering Technology, College of Engineering & Technology, Old Dominion University, November 2021.
- External Reviewer, Tenure and Promotion candidate, McWhorter School of Building Sciences, College of Architecture, Design & Construction, Auburn University, August 2021.
- External Reviewer, Promotion candidate, Construction Management Technology, School of Construction Management Technology, Purdue University, August 2021.

- Airport Operation and Maintenance Panel Member, Airport Cooperative Research Program University Design Competition for Addressing Airport Needs, Virginia Space Grant Consortium, May 2021.
- American Council for Construction Education, Mentor to candidate program – Tarleton State University, fall 2020 – present.
- External Reviewer, Promotion candidate, Architectural Engineering and Construction Science, College of Engineering, Kansas State University, fall 2020.
- External Reviewer, Tenure and Promotion candidate, Engineering Technology & Construction Management, William States Lee College of Engineering, University of North Carolina at Charlotte, fall 2020.
- Airport Operation and Maintenance Panel Member, Airport Cooperative Research Program University Design Competition for Addressing Airport Needs, Virginia Space Grant Consortium, May 2020.
- External Reviewer, Tenure and Promotion candidate, Construction Management, College of Engineering, Architecture & Technology, Oklahoma State University, fall 2019.
- External Reviewer, Promotion candidate, Architectural Engineering and Construction Science, College of Engineering, Kansas State University, fall 2019.
- External Reviewer, Tenure and Promotion candidate, Construction Management, School of Design and Construction, Washington State University, summer 2019.
- Airport Operation and Maintenance Panel Member, Airport Cooperative Research University Design Competition for Addressing Airport Needs, Virginia Space Grant Consortium, May 2019.
- Airport Cooperative Research Program 11-04 Graduate Research Award Program on Public-Sector Aviation Issues, Mentor, *Airport Building Information Modeling (ABIM) Implementation Framework for Smart Airport Life Cycle Management*, August 2018 – May 2019.
- American Council for Construction Education, Standards Committee, fall 2018 – present.
- American Council for Construction Education, Guidance Committee, fall 2018 – present.
- External Reviewer, Tenure and Promotion candidate, Construction Management, College of Architecture and the Built Environment, Thomas Jefferson University – East Falls Campus, summer 2018.
- External Reviewer, Tenure and Promotion candidate, Construction Science, College of Architecture, Texas A&M University, summer 2018.
- Airport Operation and Maintenance Panel Member, Airport Cooperative Research University Design Competition for Addressing Airport Needs, Virginia Space Grant Consortium, May 2018.
- Expert Panel Member, Transportation Research Board (TRB) Panel S01-18, May 2018 – March 2019.

- American Council for Construction Education, Standards Committee, fall 2017 – present.
- Reviewer, Papers, Academic Interoperability Coalition, BIM Academic Symposium, fall 2013 – present.
- Reviewer, Papers, Associated Schools of Construction International Proceedings for Annual Conference, fall 2008 - present.
- Reviewer, Articles, *International Journal of Building Pathology and Adaptation*, fall 2017 - present.
- External Reviewer, Tenure candidate, Construction Science, College of Architecture, Texas A&M University, summer 2017.
- External Reviewer, Tenure and Promotion candidate, Construction Engineering, College of Civil, Environmental, and Construction Engineering, Texas Tech University, fall 2016.
- External Program Reviewer, Mississippi State University Provost and Executive Vice President Evaluation of the Department of Building Construction Science, spring 2016.
- External Reviewer, Tenure and Promotion candidate, Construction Science, College of Architecture, Texas A&M University, summer 2015.
- Oklahoma EPSCoR Women in Science Conference, Tulsa, Oklahoma, March 2014.
- External Reviewer, Tenure and Promotion candidate, Architectural Engineering and Construction Science, College of Engineering, Kansas State University, fall 2014.
- External Reviewer, Tenure and Promotion candidate, Glenn Department of Civil Engineering, College of Engineering and Science, Clemson University, fall 2013.
- Reviewer, Articles, *Journal of Building Information Modeling*, National Institute of Building Sciences, 2013-2015.
- Reviewer, Articles, *Journal of Civil Engineering and Management*, 2013 - 2016.
- Advisory Panel and Reviewer – *Journal of the National Institute of Building Sciences*, 2013 – 2016.
- Academic Interoperability Coalition, Steering Committee, 2013 – present.
- Academic Interoperability Coalition, Secretary, 2013 – 2021.
- Reviewer, Articles, *Journal of Professional Issues in Engineering Education and Practice*, Fall 2012.
- Reviewer, Papers, Association for Educational Communications and Technology 2012 International Convention, spring 2012.
- Reviewer – “Game-based Assessment”, book chapters, summer 2011.

- Reviewer, Book, *Makers of the Environment*, Finith Jernigan, fall 2011.
- Reviewer - *United States Air Force Building Information Modeling (BIM) Flight Plan*, Air Force Center for Engineering and the Environment (AFCEE), spring 2011.
- Reviewer, Articles, *Journal of Construction Management and Economics*, 2010 - present.
- Reviewer, Articles, *Journal of Automation in Construction*, 2009 – present.
- Reviewer, Article, *International Journal of Law in the Built Environment*, fall 2008.
- CIB Task Group 69, Green Buildings and the Law, International Council for Research and Innovation in Building and Construction, 2007 – 2010.

Professional Organization Service – Leadership

- Association for the Advancement of Cost Engineering, BIM Technical Sub-Committee Chair, 2011 – 2017.
- buildingSMART alliance, Board of Direction, 2011 – 2015.
- buildingSMART alliance, QTie project, Chair, 2011 – January 2017.
- buildingSMART alliance, Capability Maturity Model project, Chair, 2011 – fall 2016.
- buildingSMART alliance, Task Team Leader, *Level of Detail for Estimating in BIM*, a collaborative project with the Association for the Advancement of Cost Engineers, Americans Society of Professional Estimators, and the Royal Institute of Chartered Surveyors, 2010 – fall 2014.
- Association for the Advancement of Cost Engineering International, Oklahoma Chapter, Board Member and Program Director, 2008 -2010.

Professional Organization Service

- Construction Workforce Education Committee, member, spring 2022 – present.
- Core BIM Work Group, BIM Council, National Institute of Building Sciences, fall 2020 – present.
- Design-Build Institute of America University Outreach and Engagement Committee member, 2016 – present.
- Association for the Advancement of Cost Engineering, Reviewer, Papers, 2015 – fall 2018.
- buildingSMART alliance, Education Advisory Committee, 2012 – 2013.
- Association for Educational Communications and Technology member, 2012 – 2013.
- Oklahoma Engineering Foundation, Engineering Fair, volunteer, Oklahoma City, 2011 and 2012.
- Association for the Advancement of Cost Engineering International, Oklahoma Chapter, Scholarship Committee member, spring 2011.

- buildingSMART alliance, NBIMS Planning Committee, 2010 – 2011.
- National BIM Standard Project Committee, 2010 – 2015.
- Association for the Advancement of Cost Engineering International, BIM technical sub-committee member, 2008 – 2018.
- buildingSMART alliance, member, Speakers Bureau - Building Information Modeling and Education Committee, 2008 – 2015.
- National Building Information Modeling Standard Consensus Task Team, Leader, 2008 – 2009.
- National Building Information Modeling Standard Facility Information Council Member, 2007 – 2008.
- National Building Information Modeling Standard Testing Team Member, Communication Liaison, 2007 – 2008.
- AIA TAP BIM Award Winners, Evaluator, 2007 & 2008.

Professional Organization – Membership

- American Society of Civil Engineers, Associate Member, July 2019 – December 2021.
- Design-Build Institute of America, member, July 2014 – present.
- National Institute of Building Sciences, member, 2007 – present.
- Association for the Advancement of Cost Engineering International, Oklahoma Chapter, member, fall 2007 – fall 2017.

INDUSTRY EXPERIENCE

2017 – present Principal, BIM-SIM Solutions, LLC, Norman, OK
 2001 – 2006 Principal, 1-2-1 Construction Services, LLC, Oklahoma City, OK
 1999 – 2001 Project Manager & Chief Estimator, Bell Industries, Edmond, OK
 1997 – 1999 Vice President, Preconstruction Manager, Bridgeport Development, Oklahoma City, OK
 1992 – 1997 Product Development Manager & Chief Estimator, Heartland Builders, Oklahoma City, OK
 1992 BIM Beta Tester, Heartland Builders, Oklahoma City, OK

Professional/Community Honors and Awards

- 50 Making a Difference, Woman of the Year finalist, *The Journal Record*, September 2005
- 50 Making a Difference, Woman of the Year finalist, *The Journal Record*, September 2004
- Achievers Under 40, Inaugural Class, *The Journal Record*, May 2004

Professional Associations

- National Association of Women Business Owners (NAWBO) 2002 – 2005, Director of Education and Training, 2003 – 2005.
- Waterford Business Club, 2002 – 2005, President 2005.

Professional Publications

- 1-2-1 Construction Services, Featured Article in *Nichols Hills News, Quail Creek News, and Edmond Monthly* magazines, 2004.
- “Developing and Constructing Healthier Communities,” *The Journal Record*, May 26, 2004.
- “Business owner is quite the peddler,” *The Oklahoman*, August 22, 2004.
- “The Challenge of Affordable Housing,” Quoted, *Professional Builder Magazine*, 1996.

Community Activities

- Rebuilding Together OKC, President, Board of Directors, 2006 – 2007.
- Rebuilding Together OKC, Board of Directors, 2003 – 2007.
- Rebuilding Together OKC, Strategic Planning Committee member, Program volunteer, 2003 – 2007.
- Central Oklahoma Turning Point, Stakeholder, Community Engagement Chairman, 2004 – 2007.
- OKC Velo, Women’s Racing and Development Team, Vice President, 2005 – 2007.

Areas of Interest

Smart Cities, Digital Twins, Construction BIM, Digitized Built Environment, Data Driven Asset Management, Construction Workforce Development, Preconstruction Services, Sustainable Construction Practice, Design-Build Project Delivery, BIM Education, BIM Implementation.