

**YONG BAI, Ph.D., P.E., F.ASCE**

**Working Address:**

McShane Endowed Chair and Professor  
The Construction Engineering Program  
Department of Civil, Construction and Environmental Engineering  
Marquette University  
257 Haggerty Hall  
P. O. Box 1881  
Milwaukee, WI 53201-1881  
Phone: (414) 288-6708  
E-mail: yong.bai@marquette.edu

**Education:**

Ph.D., Civil Engineering/Construction Engineering and Management, December 1996,  
Department of Civil, Construction, and Environmental Engineering, North Carolina State  
University, Raleigh, North Carolina (Minor in Industrial Engineering).

Master of Science, Civil Engineering/Construction Engineering and Management, May  
1992, Department of Civil Engineering, Clemson University, Clemson, South Carolina.

Bachelor of Engineering, Civil Engineering, July 1986, Department of Civil Engineering,  
Tsinghua University, Beijing, China.

**Professional Registration:**

Professional Engineer (Civil), State of Texas (License No. 88143), April 27, 2001 - Present

**Higher Education Working Experience (23+ years):**

**Marquette University**, Milwaukee, Wisconsin

McShane Endowed Chair and Professor (August 2016 – Present), in charge of the  
Construction Engineering Program, Department of Civil, Construction and Environmental  
Engineering.

- Provide leadership in the Construction Engineering programs at both undergraduate and graduate levels.
- Maintain the ABET accreditation of BS in Construction Engineering program. BS in Construction Engineering received 6-year ABET reaccreditation in 2019.
- Develop new and modify existing curriculums to meet the constantly changing needs of the construction industry and the society.
- Enhance research program in Construction Engineering synergistic with the ongoing research in the Department, College, and University.
- Engage the construction industry and fundraise to support scholarships and student activities and enhance teaching and learning environment.
- Coordinate recruitment and outreach activities, maintain a good public relation, and represent the Construction Engineering program in the public events.
- Advise the construction student organization and mentor undergraduate and graduate students for their professional development.

- Enhance international collaborations in construction education and research.

**North Dakota State University**, Fargo, North Dakota

Chair and Professor (July 2012 – August 2016), Department of Construction Management and Engineering.

- Provide leadership for the development of Department.
- Manage five-degree programs: BS in Construction Engineering (ABET accredited), BS in Construction Management (ACCE accredited), Master of Construction Management (online program), Master of Science in Construction Management, and International 2 Plus BS in Construction Management Program with Shandong Jianzhu University and Guangzhou University, China. Undergraduate student enrollment increased 10%, from 199 in fall 2012 to 219 in fall 2015.
- Co-manage the Ph.D. in Civil Engineering program with an emphasis in Construction Engineering and Management. Ph.D. in Civil/Construction Engineering enrollment increased from 1 in fall 2012 to 7 in fall 2015.
- Manage the Graduate Certificate program in Construction Management (online program). Student enrollment in the certificate program increased from 0 in fall 2012 to 7 in fall 2015.
- Manage department personnel including ongoing searching for faculty and staff, retention of faculty and staff, resolving interpersonal conflict, and conducting annual performance evaluation. Successfully hired 4 tenure-track faculty members (3 assistant professors and 1 associate professor), Faculty number increased from 6 in fall 2012 to 10 in fall 2015.
- Manage department budget and resource in a transparent manner for the sustainable development of educational and research programs. Balanced budget in each year.
- Maintain accreditations of degree programs and address weaknesses and concerns for each educational program. BS in Construction Engineering received 6-year ABET reaccreditation in 2013. BS in Construction Management received 6-year ACCE reaccreditation in 2015.
- Increase retention and graduation rates by improving classroom teaching and advising.
- Develop new and modify existing curriculums to meet the constantly changing needs of the construction industry and the society.
- Enhance existing research programs and develop new research programs synergistic with the ongoing research in the Department, College, and University. Ph.D. enrollment, funding, and publication were all increased.
- Engage the construction industry and fundraise to support scholarships and student activities, and to enhance teaching and learning environment.
- Coordinate recruitment and outreach activities, maintain a good public relation, and represent department at all levels.

**The University of Kansas**, Lawrence, Kansas

Associate Professor and Director of the Emerging Technologies for Sustainable Infrastructure Laboratory (August 2008 - July 2012), Department of Civil, Environmental and Architectural Engineering.

Assistant Professor (August 2003 - August 2008), Department of Civil, Environmental and Architectural Engineering.

Core faculty member (August 2004 - July 2012), Center for East Asian Studies.

Affiliated faculty member (August 2009 - July 2012), Center for Global and International Studies.

**Texas Tech University**, Lubbock, Texas

Assistant Professor (August 1999 - August 2003), Department of Engineering Technology.

**Construction Industry Working Experience (6+ years):**

**J. A. Jones Construction Company**, Charlotte, North Carolina

Project Controls Engineer (October 1998 - August 1999): A management team member for the Merck & Co., Inc. expansion project in New Jersey. Major duties include: 1) forecast cash flow and monitor budget, 2) track man-hour, direct, and indirect costs, 3) analyze labor productivity, 4) evaluate contract change orders, and 5) prepare monthly cost, change order, man-hour, and productivity reports.

Office Engineer/Procurement Manager (December 1996 - October 1998): Supervised three management team members for the Anheuser-Busch's brewery expansion project in Wuhan, China. Major duties include: 1) select design firms, contractors, and vendors, 2) prepare tender documents, 3) organize bid meetings, 4) evaluate bid proposals, 5) negotiate contracts, and 6) manage contracts during construction.

**China State Construction Engineering Corporation**, Shanghai Branch, China.

Assistant Field Engineer (July 1986 - December 1989): A management team member for two commercial (hotel) projects in Shanghai, China. Major duties include: 1) survey and layout, 2) design formwork, 3) coordinate design and construction, 4) order, receive, and store materials, tools, and equipment, 5) prepare daily working schedule, 6) estimate costs of design and construction changes, and 7) conduct quality and safety meetings.

**Editorships:**

1. Specialty Editor in Labor and Personnel Issues, Journal of Construction Engineering and Management, American Society of Civil Engineers, Reston, VA, 2006-Present.
2. Editorial Board Member, Journal of Engineering Management, Harbin, China, 2009-Present.
3. Editorial Board Member, Journal of Chongqing Jiaotong University (Natural Science), Chongqing, China, 2010-Present.

### **Fellowships, Honors, and Awards:**

1. 2007 Faculty Fellowship, Center for Teaching Excellence, University of Kansas.
2. 2005 Dwight D. Eisenhower Faculty Fellowship, Federal Highway Administration.
3. 2005 ExCEED Fellowship, American Society of Civil Engineers.
4. 2004 National Effective Teaching Institute Fellowship, American Society for Engineering Education.
5. Sigma Lambda Chi, International Construction Honor Society, 2013.
6. Fellow, American Society of Civil Engineers, 2010.
7. Chi Epsilon, Civil Engineering Honor Society, 1994.
8. Participant Award, the 19<sup>th</sup> Annual International Seminar, International Programs, University of Kansas, spring semester, 2012.
9. Partner, Partners in Teaching Excellence Group, Center for Teaching Excellence, University of Kansas, 2010-2012.
10. Excellent Service Award, International Chinese Transportation Professionals Association, May 28<sup>th</sup>, 2010.
11. Excellent Service Award, AGC Student Chapter, University of Kansas, December 2006.
12. Competent Toastmaster (CTM) Award, Toastmasters International, Mission Viejo, CA, April 14, 2005.
13. Best Session Paper Award, "Improving Highway Work Zone Safety," Proceedings of Texas Section of American Society of Civil Engineers Fall Meeting, Waco, Texas, Page 1-10, October 2 - 5, 2002.

### **Author/Co-Author of Books (\* indicates my students):**

1. Yong Bai, Jun Huan, and \*Seonghoon Kim, "Highway Bridge Replacement: Processes, Techniques, and Advancements," Nova Science Publishers, Inc., Hauppauge, New York, January 2011 (ISBN: 978-1-61122-300-2, Hardcover).
2. \*Yi Lan, Feifei Cheng, and Yong Bai, "The Global Expansion of Chinese Construction Companies: Whether they are sustainable at the current speed of expansion," VDM Verlag, Saarbrücken, Germany, December 2010 (ISBN: 978-3-639-31771-8, Paperback).
3. \*Yilei Huang and Yong Bai, "The Growth Trend of the Chinese Construction Industry: When it will Surpass the U.S. Construction Industry," VDM Verlag, Saarbrücken, Germany, February 2010 (ISBN: 978-3-639-23172-4, Paperback).
4. \*Yingfeng Li and Yong Bai, "Analyzing Highway Work Zone Crashes and Traffic Control Effectiveness: Utilizing Effective Safety Countermeasures to Reduce Vehicle Crash Risks," VDM Verlag, Saarbrücken, Germany, November 2009 (ISBN: 978-3-639-21484-0, Paperback).
5. \*Ka Wah Chui and Yong Bai, "Comparison of Contract General Conditions between the US and China: Becoming More Competitive in the Chinese Construction Market," VDM Verlag, Saarbrücken, Germany, August 2009 (ISBN: 978-3-639-18756-4, Paperback).

### **Editor/Co-Editor of Books:**

1. Fengxiang Qiao, Yong Bai, Pei-Sung Lin, Steven I Jy Chien, Yongping Zhang, and Lin Zhu, "Resilience and Sustainable Transportation Systems," Proceedings of the 13<sup>th</sup> Asia Pacific Transportation Development Conference, ASCE, Reston, VA, May 2020, ISBN: 9780784482902, <https://ascelibrary.org/doi/book/10.1061/9780784482902>.
2. Yaowu Wang, Thomas Olofsson, Geoffrey Q. P. Shen, and Yong Bai, "Environment and the Sustainable Building," Proceedings of the 2015 International Conference on Construction and Real Estate Management, ASCE, Reston, VA, August 2015 (ISBN: 978-0-7844-7937-7).
3. Yaowu Wang, Haowen Ye, Geoffrey Q. P. Shen, and Yong Bai, "Smart Construction and Management in the Context of New Technology," Proceedings of the 2014 International Conference on Construction and Real Estate Management, ASCE, Reston, VA, October 2014 (ISBN: 978-0-7844-1377-7).
4. Yong Bai, Xiuli Du, Pei-Sung Lin, Wei-Chou Virgil Ping, Endi Zhai, and Yilei Huang, "Challenges and Advances in Sustainable Transportation Systems," Proceedings of the 10<sup>th</sup> Asia Pacific Transportation Development Conference, ASCE, Reston, VA, May 2014 (ISBN: 978-0-7844-1336-4).
5. Yaowu Wang, Kunibert Lennerts, Geoffrey Q. P. Shen, and Yong Bai, "Construction and Operation in the Context of Sustainability," Proceedings of the 2013 International Conference on Construction and Real Estate Management, ASCE, Reston, VA, October 2013 (ISBN: 978-0-7844-1313-5).
6. Yaowu Wang, Yong Bai, and Geoffrey Q. P. Shen, "Proceedings of 2012 International Conference on Construction and Real Estate Management," Vol. 1 and 2, China Architecture and Building Press, Beijing, China, September 2012, (ISBN: 978-7-112-14631-4).
7. Yong Bai, Wei-Chou Virgil Ping, L. David Shen, and Xiaohu Chen, "Sustainable Transportation System: Planning, Design, Build, Management, and Maintenance," Proceedings of the 9<sup>th</sup> Asia Pacific Transportation Development Conference, ASCE, Reston, VA, June 2012 (ISBN: 978-0-7844-1229-9).
8. Zhengyi Shon and Yong Bai, "Selected Papers of the 8<sup>th</sup> Asia Pacific Transportation Development Conference and the 23<sup>rd</sup> ICTPA Annual Meeting," Han Chia Publish, Tainan, Taiwan, May 2011 (ISBN: 978-986-6341-20-5).

### **Journal Papers (\* indicates my students):**

1. Yuhan Jiang\*, Sisi Han\*, and Yong Bai, "Scan4Façade: Automated As-Is Façade Modeling of Historic High-Rise Buildings Using Drones and AI," Journal of Architectural Engineering, ASCE, Vol. 28, Issue 4, December 2022. <https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29AE.1943-5568.0000564>

2. Yuhan Jiang\*, Sisi Han\*, Dapeng Li, Yong Bai, and Mingzhu Wang, "Automatic Concrete Sidewalk Deficiency Detection and Mapping with Deep Learning," *Expert Systems With Applications*, Elsevier, 117980, published online on June 27, 2022.  
<https://doi.org/10.1016/j.eswa.2022.117980>.
3. Sisi Han\*, Yuhan Jiang\*, Yong Bai, "Fast-PGM&ED: Fast and Dense Elevation Determination for Earthwork Using Drone and Deep Learning," *Journal of Construction Engineering and Management*, ASCE, Vol. 148, Issue 4, April 2022.  
<https://ascelibrary.org/doi/10.1061/%28ASCE%29CO.1943-7862.0002256>
4. Yuhan Jiang\*, Sisi Han\*, and Yong Bai, "Building and Infrastructure Defect Detection and Visualization Using Drone and Deep Learning Technologies," *Journal of Performance of Constructed Facilities*, ASCE, Vol. 35, Issue 6, December 2021.  
<https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29CF.1943-5509.0001652>.
5. Yuhan Jiang\* and Yong Bai, "Low-High Orthoimage Pairs-Based 3D Reconstruction for Elevation Determination Using Drone," *Journal of Construction Engineering and Management*, ASCE, Vol. 147, Issue 9, Sept. 2021.  
<https://ascelibrary.org/doi/10.1061/%28ASCE%29CO.1943-7862.0002067>.
6. Yuhan Jiang\*, Sisi Han\*, and Yong Bai, "Development of a Pavement Evaluation Tool Using Aerial Imagery and Deep Learning," *Journal of Transportation Engineering, Part B: Pavements*, ASCE, Vol. 147, Issue 3, Sept. 2021.  
<https://ascelibrary.org/doi/abs/10.1061/JPEODX.0000282>.
7. Yuhan Jiang\*, Yong Bai, and Sisi Han\*, "Determining Ground Elevations Covered by Vegetation on Construction Sites Using Drone-Based Orthoimage and Convolutional Neural Network," *Journal of Computing in Civil Engineering*, ASCE, Vol. 34, No. 6, November 2020. [https://doi.org/10.1061/\(ASCE\)CP.1943-5487.0000930](https://doi.org/10.1061/(ASCE)CP.1943-5487.0000930).
8. Yuhan Jiang\* and Yong Bai, "Estimation of Construction Site Elevations Using Drone-Based Orthoimagery and Deep Learning," *Journal of Construction Engineering and Management*, ASCE, Volume 146, No. 8, August 2020.  
<https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29CO.1943-7862.0001869>.
9. Yilei Huang\* and Yong Bai, "Driver Responses to Graphic-aided Portable Changeable Message Signs in Highway Work Zones," *Journal of Transportation Safety and Security*, Vol. 11, No. 6, Pages 661-682, May 7, 2018. DOI: 10.1080/19439962.2018.1463336.
10. Seonghoon Kim, Ilan Stern, Junan Shen, Mohammad Ahad, Yong Bai, "Energy Harvesting Assessment Using PZT Sensors and Roadway Materials," *International Journal of Thermal & Environmental Engineering*, Volume 16, No. 1, pp 19-25, 2018.
11. Huojun Yang, Malini Srivastava, Yanmei Xie, Yong Bai, Yao Yu, and Bradley Bowen, "Higher Education on Buildings: Case Study in the North Dakota Region," *Journal of Architectural Engineering*, ASCE, Vol. 23, No. 4, December 2017.

12. \*Chang-Ray Chen, Feifei Cheng, and Yong Bai, "Comparative Analysis of Construction Process at Building Sites," *Applied Mechanics and Materials-Advanced Engineering Technology III*, Trans Tech Publications, Vol. 865, pp 390-396, June 2017.
13. Qingpeng Man, Chengshuang Sun, Yuesheng Fei, Martin Skitmore, Yong Bai, Weizhuo Lu, "Government Motivation-Embedded Return Guarantee for Urban Infrastructure Projects based on Real Options," *Journal of Civil Engineering and Management*, Taylor & Francis, Vol. 22, No. 7, October 2016, pp. 954-966.
14. Yong Bai, Yarong Yang, and Yue Li\*, "Determining the effective location of a portable changeable message sign on reducing the risk of truck-related crashes in work zones," *Accident Analysis and Prevention*, Elsevier, Vol. 83, October 2015, pp. 197-202.
15. Wei Zhang, Yong Bai, Liang-wei Mei, and Ya-min Wang, "Comparison of Rapid Bridge Replacement Techniques between China and USA," *Journal of Civil Engineering and Management*, Vol. 32, No. 2, June 2015, in Chinese. (DOI:10.13579/j.cnki.2095-0985.2015.02.012)
16. Seonghoon Kim\* and Yong Bai, "Earthmoving Productivity in Urban Bridge Construction," *Civil Engineering and Architecture*, Vol. 3, No. 3, June 2015, pp. 48-55.
17. Yilei Huang\* and Yong Bai, "Effectiveness of Graphic-aided Portable Changeable Message Signs in Reducing Vehicle Speeds in Highway Work Zones," *Transportation Research Part C: Emerging Technologies*, Elsevier, Vol. 48, November 2014, pp. 311-321.
18. Wei Zhang and Yong Bai, "Analysis of Chinese Construction Management Research Published by International Journals from 1995 to 2012," *Journal of Engineering Management*, Vol. 28, No. 1, February 2014, pp. 138-142 (in Chinese).
19. Wei Zhang and Yong Bai, "Comparison of Construction Management Undergraduate Education between China and USA," *Journal of Engineering Management*, Vol. 27, No. 4, August 2013, pp.121-126 (in Chinese).
20. Seonghoon Kim\* and Yong Bai, "Developing a Model to Enhance Labor Productivity Using Bridge Construction Benchmark Data," *Problems of Management in the 21st Century*, Vol. 7, No.7, July 2013, pp.12-23.
21. Yilei Huang\*, Yi Lan\*, and Yong Bai, "Development of the Chinese Construction Industry after the Cultural Revolution: Administration Framework, Economic Growth, and Market Structure," *Journal of Architectural Engineering*, ASCE, Vol. 19, No. 1, March 2013, pp. 41-50.

22. Yong Bai and Yilei Huang\*, "Construction Engineering and Management Programs in USA," *Journal of Engineering Management*, Vol. 27, No. 1, February 2013, pp. 114-118 (in Chinese).
23. Yong Bai, Jun Huan, and Seonghoon Kim\*, "Measuring Bridge Construction Efficiency Using the Wireless Real-Time Video Monitoring System," *Journal of Management in Engineering*, ASCE, Vol. 28, No. 2, April 2012, pp. 120-126.
24. Qidong Cao, Thomas E. Griffin, Richard L. Morris, and Yong Bai, "Examining Fatal Commercial-Truck-Involved Crashes at Work Zones," *International Review of Business Research Papers*, World Business Institute, Victoria, Australia, Vol. 8, No. 1, January 2012, pp. 101-111.
25. Seonghoon Kim\*, Yong Bai, Yang-Ki Jung, and Dukgeun Yun, "Highway Construction Productivity Measurement with a Wireless Real-time Productivity Measurement System," *Journal of the Transportation Research Board*, No. 2228, Transportation Research Board of the National Academies, Washington, D.C., October 2011, pp. 26-33.
26. Yong Bai and Yingfeng Li\*, "Determining the Drivers' Acceptance of EFTCD in Highway Work Zone," *Accident Analysis and Prevention*, Elsevier, Vol. 43, No. 3, May 2011, pp. 762-768.
27. Fei Fei Cheng, Yao Wu Wang, Xian Zhang Ling, and Yong Bai, "A Petri Net Simulation Model for Virtual Construction of Earthmoving Operations," *Automation in Construction*, Elsevier, Vol. 20, No. 2, March 2011, pp. 181-188.
28. Kevin Heaslip, Steven D. Schrock, Ming-heng Wang, Robert Rescot, Yong Bai, and Brandon Brady, "A Closed-Course Feasibility Analysis of Temporary Rumble Strips for Use in Short-Term Work Zones," *Journal of Transportation Safety and Security*, Vol. 2, No. 4, December 2010, pp. 299-311.
29. Ka Wah Chui\* and Yong Bai, "Comparison of Contract General Conditions between the U.S. and China," *Journal of Architectural Engineering*, ASCE, Vol. 16, No. 4, December 2010, pp. 119-125.
30. Yong Bai, Kris Finger\*, and Yue Li\*, "Analyzing Motorist's Responses to Temporary Signage in Highway Work Zones," *Safety Science*, Elsevier, Vol. 48, No. 2, pp. 215-221, February 2010.
31. Yingfeng Li\* and Yong Bai, "Highway Work Zone Risk Factors and their Impact on Crash Severity," *Journal of Transportation Engineering*, ASCE, Vol. 135, No. 10, October 2009, pp. 694-701.
32. Yingfeng Li\* and Yong Bai, "Effectiveness of Temporary Traffic Control Measures in Highway Work Zones," *Safety Science*, Elsevier, Vol. 47, No. 3, pp. 453-458, March 2009.



33. Yingfeng Li\* and Yong Bai, "Development of Crash-Severity-Index Models for the Measurement of Work Zone Risk Levels," *Accident Analysis and Prevention*, Elsevier, Vol. 40, No. 5, pp1724-1731, September 2008.
34. Yingfeng Li\* and Yong Bai, "Comparison of Characteristics between Fatal and Injury Accidents in the Highway Construction Zones," *Safety Science*, Elsevier, Vol. 46, No. 4, pp. 646-660, April 2008.
35. Yong Bai and Seonghoon Kim\*, "Processes and Techniques for Rapid Bridge Replacement after Extreme Events," *Journal of the Transportation Research Board*, No. 1991, Transportation Research Board of the National Academies, Washington, D.C., October 2007, pp. 54-61.
36. Yong Bai, Seonghoon Kim\*, and William R. Burkett, "Enhancing the Capability of Rapid Bridge Replacement after Extreme Events," *Engineering, Construction and Architectural Management*, Emerald Group Publishing Limited, Vol. 14, No. 4, August 2007, pp. 375-386.
37. Yong Bai, "Intelligent Painting Process Planner for Robotic Bridge Painting," *Journal of Construction Engineering and Management*, ASCE, Vol. 133, No.4, April 2007, pp. 335-342.
38. Yong Bai and William R. Burkett, "Rapid Bridge Replacement: Processes, Techniques, and Needs for Improvements," *Journal of Construction Engineering and Management*, ASCE, Vol. 132, No. 11, November 2006, pp. 1139-1147.
39. Yong Bai, William R. Burkett, and Phillip T. Nash, "Rapid Bridge Replacement under Emergency Situation: Case Study," *Journal of Bridge Engineering*, ASCE, Vol. 11, No. 3, May 2006, pp. 266-273.
40. Yong Bai, William R. Burkett, and Phillip T. Nash, "Lessons Learned from an Emergency Bridge Replacement Project," *Journal of Construction Engineering and Management*, ASCE, Vol. 132, No. 4, April 2006, pp. 338-344.
41. Yong Bai and Ron Pigott, "Assessing Outcomes Using Program Assessment Portfolio Approach," *Journal of Professional Issues in Engineering Education and Practice*, ASCE, Vol. 130, No. 4, October 2004, pp. 246-254.
42. Yong Bai and Leonhard E. Bernold, "Quality Control Parameters for Robotic Bridge Painting," *Journal of Construction Engineering and Management*, ASCE, Vol. 127, No. 2, March/April 2001, pp. 142-148.
43. Yong Bai and Serji Amirkhanian, "A Knowledge Based Expert System for Concrete Mix Design," *Journal of Construction Engineering and Management*, ASCE, Vol. 120, No. 2, June 1994, pp. 357-373.

**Conference Papers (\* indicates my students):**

1. Yuhan Jiang\*, Sisi Han\*, and Yong Bai, "Construction Site Segmentation Using Drone-Based Ortho-Image and Convolutional Encoder-Decoder Network Model," Proceedings of the 2022 Construction Research Congress, ASCE, Reston, Virginia, March 9-12, 2022, pp 1096-1105. <https://ascelibrary.org/doi/10.1061/9780784483961.115>.
2. Yuhan Jiang\*, Sisi Han\*, and Yong Bai, "Machine Learning-Based Temporary Traffic Control Cost Analysis," Proceedings of the 13th Asia Pacific Transportation Development Conference, ASCE, Reston, VA, pp. 86-96, May 27-30, 2020, <https://ascelibrary.org/doi/book/10.1061/9780784482902>.
3. Yuhan Jiang\* and Yong Bai, "Determination of Construction Site Elevations Using Drone Technology," Proceedings of the Construction Research Congress 2020, ASCE, Reston, VA, pp. 296-305, March 8-10, 2020. <https://ascelibrary.org/doi/10.1061/9780784482865.032>
4. Emad T. Nasi\* and Yong Bai, "Construction Labor Productivity Benchmarking: A Comparison between On-site Construction and Prefabrication," Proceedings of the 2019 CSCE Annual Conference, Laval, Canada, June 12-15, 2019.
5. \*Yuhan Jiang, Yong Bai, \*Sisi Han, and Ting Lin, "Probability of Failure in Infrastructure Project Unbalanced Bidding," Proceedings of the 55<sup>th</sup> Annual Associated Schools of Construction International Conference, Associated Schools of Construction, Denver, CO, April 10-13, 2019.
6. Junqiang Ma, Qingpeng Man, and Yong Bai, "Study of a Self-Help House Decoration Mode Based on BIM," Proceedings of the 2015 International Conference on Construction and Real Estate Management, August 11-12, 2015, ASCE, Reston, Virginia, pp. 229-237.
7. Seonghoon Kim, Lixin Li, Adam Vaclavik, Yong Bai, Hae-bum Yun, and Liuliu Wu, "Developing a Real-Time Basis Construction Cost Estimating and Scheduling (RBCCES) System," Proceedings of the 51<sup>st</sup> ASC Annual International Conference, Associated Schools of Construction, College Station, Texas, April 22-25, 2015.
8. \*Yilei Huang and Yong Bai, "Determining the Impact of Gender and Age on Drivers' Acceptance of Graphic-Aided Portable Changeable Message Signs in Highway Work Zones," Proceedings of the 10th Asia Pacific Transportation Development Conference, ASCE, Reston, Virginia, May 25-27, 2014, pp 443-450.
9. Wei Zhang, Yong Bai, and \*Yilei Huang, "Risk Management for Build-transfer Plus Land Usage Fee Reimbursement Delivery Method in China," Proceedings of the 2014 Construction Research Congress, ASCE Reston, Virginia, May 19-21, 2014, pp 1871-1880.
10. Seonghoon Kim, Marcel Maghiar, Lixin Li, Yong Bai, and Jason Scott, "Developing a Knowledge-based Information System (KISCCES) for Construction Cost Estimating and

Scheduling," Proceedings of the 2014 Construction Research Congress, ASCE, Reston, Virginia, May 19-21, 2014, pp 887-896.

11. Steven D. Schrock, Eric J. Fitzsimmons, Tomas Lindheimer, Ming-Heng Wang, and Yong Bai, "Work Zone Positive Protection Policy Guidance: Synthesis of Devices and State of Practice," Proceedings of the 93<sup>rd</sup> Transportation Research Board Annual Meeting, January 12-16, 2014, Washington, D.C.
12. Wei Zhang and Yong Bai, "Risk Allocation and Dispute Resolution Mechanism in Chinese Public Projects: An Empirical Study," Proceeding of the 2013 International Conference on Construction and Real Estate Management, October 10-11, 2013, ASCE, Reston, Virginia, pp. 637-649.
13. \*Yilei Huang, Zhili Gao, and Yong Bai, "An Overview of the Research Areas in Construction Engineering and Management in the United States: 2010-2012," Proceedings of the 2013 Engineering Management Annual Conference, China Building Industry Publication, Beijing, China, September 7-8, 2013, pp. 87-105 (in Chinese).
14. \*Yilei Huang and Yong Bai, "Effectiveness of Graphic-Aided Portable Changeable Message Signs in Reducing Vehicle Speeds in Highway Work Zones," Proceedings of the 92<sup>nd</sup> Transportation Research Board Annual Meeting, January 13-17, 2013, Washington, D.C.
15. \*Seonghoon Kim, Yong Bai, and Yangki Jung, "Determining Significant Factors for Earthmoving in Bridge Construction," Proceedings of the 92<sup>nd</sup> Transportation Research Board Annual Meeting, January 13-17, 2013, Washington, D.C.
16. \*Seonghoon Kim and Yong Bai, "Bridge Construction Productivity Measurement using a Wireless Real-Time Productivity Measurement System," Proceedings of the 2012 International Conference on Construction and Real Estate Management, China Architecture and Building Press, Beijing, October 1-2, 2012, pp 16-21.
17. \*Yilei Huang and Yong Bai, "Investigating the Market Structure of the Chinese Construction Industry," Proceedings of the 2012 International Conference on Construction and Real Estate Management, China Architecture and Building Press, Beijing, October 1-2, 2012, pp 1-6.
18. Yonghong Gao and Yong Bai, "Mode of Investment and Financing on Wangjiadun CBD Underground Space in Wuhan," Proceedings of the 2012 International Conference on Construction and Real Estate Management, China Architecture and Building Press, Beijing, October 1-2, 2012, pp 644-648.
19. \*Rita Neff and Yong Bai, "Developing a Sustainable Freight Transportation Framework with the Consideration of Improving Safety and Minimizing Carbon Emissions," Proceedings of the 9<sup>th</sup> Asia Pacific Transportation Development Conference, June 29 – July 1<sup>st</sup>, 2012, ASCE, Reston, Virginia, pp 146-153.

20. \*Yilei Huang and Yong Bai, "Determining Drivers' Acceptance of Using Graphics on Portable Changeable Message Signs in Highway Work Zones," Proceedings of the 9<sup>th</sup> Asia Pacific Transportation Development Conference, June 29 – July 1<sup>st</sup>, 2012, ASCE, Reston, Virginia, pp 387-394.
21. \*Yue Li, \*Feifei Cheng, Yong Bai, "Characteristics of Truck-Related Crashes in Highway Work Zones," Proceedings of the 9<sup>th</sup> Asia Pacific Transportation Development Conference, June 29 – July 1<sup>st</sup>, 2012, ASCE, Reston, Virginia, pp 364-371.
22. \*Seonghoon Kim and Yong Bai, "Monitoring the Efficiency of Bridge Construction Using LWSM Model," Proceedings of the 2012 Construction Research Congress, May 21-23, 2012, ASCE, Reston, Virginia, CD-ROM.
23. \*Yue Li and Yong Bai, "Determining the Optimal Deployment Location of a Portable Changeable Message Sign in the Upstream of Work Zones," Proceedings of the 91<sup>st</sup> Transportation Research Board Annual Meeting, January 22-26, 2012, Washington, D.C.
24. \*Yi Lan and Yong Bai, "The Expansion of Chinese Construction Companies in the Global Market," Proceedings of the 47<sup>th</sup> Annual Associated Schools of Construction International Conference, April 6<sup>th</sup>-9<sup>th</sup>, 2011, Omaha, Nebraska, pp 577-584.
25. \*Yilei Huang and Yong Bai, "The Development Trend of the Chinese and U.S. Construction Industries," Proceedings of the 47<sup>th</sup> Annual Associated Schools of Construction International Conference, April 6<sup>th</sup>-9<sup>th</sup>, 2011, Omaha, Nebraska, pp 569-576.
26. \*Ka Wah Chui, David Shields, and Yong Bai, "On-site Labor Productive Measurement for Sustainable Construction," Proceedings of the International Conference on Sustainable Design and Construction, March 23-25, 2011, Kansas City, MO, pp 335-343.
27. \*Seonghoon Kim and Yong Bai, "A Wireless Technique Application for Measuring Highway Construction Productivity," Proceedings of the Second International Conference on Transportation Construction Management, February 7-10, 2011, Orlando, Florida.
28. \*Seonghoon Kim, Yong Bai, Yang-Ki Jung, and Dukgeun Yun, "Highway Construction Productivity Measurement Using a Wireless Real-time Productivity Measurement System," Proceedings of the 90<sup>th</sup> Transportation Research Board Annual Meeting, January 23-27, 2011, Washington, D.C.
29. \*Yue Li, \*Yingfeng Li, and Yong Bai, "Improving Work Zone Safety Using Portable Changeable Message Sign," Proceedings of the 8<sup>th</sup> Asia Pacific Transportation Development Conference, May 27-30, 2010, Taiwan.

30. \*Chunxiao Liu, Yong Bai, and Steven Schrock, "Development of Empirical Models to Estimate Pavement Damage Cost Attributed to Truck Traffic," Proceedings of the 8<sup>th</sup> Asia Pacific Transportation Development Conference, May 27-30, 2010, Taiwan.
31. \*Ka Wah Chui and Yong Bai, "Comparison of Construction Labor Productivity between U.S. and China," Proceedings of 2010 Construction Research Congress, May 8th-10th, 2010, ASCE, Reston, Virginia, Vol. 2, pp 990-999.
32. \*Yilei Huang and Yong Bai, "The Growth Trend of the Chinese Construction Industry after the Culture Revolution," Proceedings of the 46th Annual Associated Schools of Construction International Conference, April 7th-10th, 2010, Boston, Massachusetts.
33. \*Yue Li, Yong Bai, and \*Umar Firman, "Determining the Effectiveness of PCMS on Reducing Vehicle Speed in Rural Highway Work Zones," Proceedings of the 89th Transportation Research Board Annual Meeting, January 10-14, 2010, Washington, D.C., CD-ROM.
34. Yong Bai, Luke Huan, \*Abhinav Peddi, and \*Seonghoon Kim, "Determination of On-site Construction Labor Productivity Using Artificial Neural Networks," Proceedings of the 89th Transportation Research Board Annual Meeting, January 10-14, 2010, Washington, D.C., CD-ROM.
35. \*Seonghoon Kim and Yong Bai, "Enhancing the Capability of Bridge Construction Using the WRITE System," Proceedings of the 89th Transportation Research Board Annual Meeting, January 10-14, 2010, Washington, D.C., CD-ROM.
36. \*Seonghoon Kim and Yong Bai, "Improving On-site Construction Productivity Using the WRITE System," Proceedings of the 2009 Mid-Continent Transportation Research Symposium, August 20-21, 2009, Ames, Iowa, CD-ROM.
37. \*Umar Firman, \*Yue Li, and Yong Bai, "Determining the Effectiveness of Portable Changeable Message Sign in Work Zone," Proceedings of the 2009 Mid-Continent Transportation Research Symposium, August 20-21, 2009, Ames, Iowa, CD-ROM.
38. Steven D. Schrock, Fei See Chen, Jamila Saadi, Wai Kiong Chong, and Yong Bai, "Evaluation of Technology-Enhanced Flagger Devices in Work Zones: Focus Group and Survey Studies in Kansas," Proceedings of the 2009 Mid-Continent Transportation Research Symposium, August 20-21, 2009, Ames, Iowa, CD-ROM.
39. \*Chunxiao Liu, Yong Bai, and \*Yingfeng Li, "Determining Pavement Damage Cost Attributed to Truck Traffic in Southwest Kansas," Proceedings of the 2009 Mid-Continent Transportation Research Symposium, August 20-21, 2009, Ames, Iowa, CD-ROM.
40. \*Erin Wurfel, Yong Bai, Luke Huan, and \*Vincent Buhr, "Development of a Freight Analysis Framework for the Kansas City Metropolitan Area," Proceedings of the 2009

Mid-Continent Transportation Research Symposium, August 20-21, 2009, Ames, Iowa, CD-ROM.

41. \*Seonghoon Kim, Yong Bai, Luke Huan, and \*Abhinav Peddi, "Measuring Construction Productivity Using the WRITE System," Proceedings of the 2009 Construction Research Congress, April 5-7, 2009, ASCE, Reston, Virginia, Vol. 1, pp. 131-140.
42. \*Abhinav Peddi, Luke Huan, Yong Bai, and \*Seonghoon Kim, "Development of Human Pose Analyzing Algorithms for the Determination of Construction Productivity in Real-time," Proceedings of the 2009 Construction Research Congress, April 5-7, 2009, ASCE, Reston, Virginia, Vol. 1, pp. 11-20.
43. \*Yingfeng Li and Yong Bai, "Reducing Work Zone Crashes by Using Emergency Flasher Traffic Control Device," Proceedings of the 88th Transportation Research Board Annual Meeting, January 11-15, 2009, Washington, D.C., CD-ROM.
44. \*Kris Finger, Yong Bai, \*Yue Li, and \*Umar Firman, "Determining Motorists' Response to Signage in Rural Highway Work Zones," Proceedings of the 88th Transportation Research Board Annual Meeting, January 11-15, 2009, Washington, D.C., CD-ROM.
45. \*Seonghoon Kim and Yong Bai, "Development of a Wireless Real-time Productivity Measurement System for Bridge Construction," Proceedings of the 88th Transportation Research Board Annual Meeting, January 11-15, 2009, Washington, D.C., CD-ROM.
46. \*Yingfeng Li and Yong Bai, "Effectiveness of Temporary Traffic Control Measures in Highway Work Zones," Proceedings of the Transportation Research Board 87th Annual Meeting, January 13-17, 2008, Washington, D.C., CD-ROM.
47. \*Yingfeng Li and Yong Bai, "Fatal and Injury Characteristics in Highway Work Zones," Proceedings of the Transportation Research Board 87th Annual Meeting, January 13-17, 2008, Washington, D.C., CD-ROM.
48. \*Yingfeng Li and Yong Bai, "Development of Crash-Severity-Index Models based on Work Zone Crash Severity Analyses," Proceedings of the Transportation Research Board 87th Annual Meeting, January 13-17, 2008, Washington, D.C., CD-ROM.
49. \*Yingfeng Li and Yong Bai, "Investigating the Impacts of Human Factors on Severe Crashes in Highway Work Zones," Proceedings of Mid-Continent Transportation Symposium, August 16-17, 2007, Ames, Iowa, CD-ROM.
50. \*Seonghoon Kim and Yong Bai, "Development of a Real-Time Productivity Measurement System for Bridge Replacement," Proceedings of Mid-Continent Transportation Symposium, August 16-17, 2007, Ames, Iowa, CD-ROM.

51. \*Yingfeng Li and Yong Bai, "Determining the Effectiveness of Temporary Traffic Control Measures in Highway Work Zones," Proceedings of Mid-Continent Transportation Symposium, August 16-17, 2007, Ames, Iowa, CD-ROM.
52. Yong Bai and Wai Kiong Chong, "Evaluating Student Learning Using Pre- and Post-course Assessment," Proceedings of 2007 ASEE Annual Conference and Exposition, June 24-27, 2007, Honolulu, Hawaii, CD-ROM.
53. Wai Kiong Chong, Sanat Kumar Pokharel, Cassandra Leyden, and Yong Bai, "A Study on LCCA Application on Measuring the Cost of Sustainable Design," Proceedings of 2007 Construction Research Congress, ASCE, May 6-8, 2007, Grand Bahama Island, CD-ROM.
54. \*Ka Wah Chui and Yong Bai, "Comparison of Contract General Conditions: U.S. AIA-A201 vs. China GF-1999-0201," Proceedings of 2007 Construction Research Congress, ASCE, May 6-8, 2007, Grand Bahama Island, CD-ROM.
55. Yong Bai and \*Seonghoon Kim, "Process and Techniques for Rapid Bridge Replacement after Extreme Events," Proceedings of the Transportation Research Board 86th Annual Meeting, January 21-25, 2007, Washington, D.C., CD-ROM.
56. \*Yingfeng Li and Yong Bai, "Investigating the Characteristics of Fatal Crashes in the Highway Construction Zones," Global Unity for Safety & Health in Construction, CIB International Conference, June 26-30, 2006, Beijing, China, pp. 301-309.
57. Yong Bai and JoAnn Browning, "Rapid Bridge Replacement after an Extreme Event," Symposium on Structures and Extreme Events, International Association for Bridge and Structural Engineering, September 14-16, 2005, Lisbon, Portugal, CD-ROM.
58. Yong Bai and William R. Burkett, "Rapid Bridge Replacement after an Extreme Event," Proceedings of the Transportation Research Board 84th Annual Meeting, January 12, 2005, Washington, D.C., CD-ROM.
59. Yong Bai, William R. Burkett, and Phillip T. Nash, "Lessons Learned from I-40 Webbers Falls Bridge Tragedy," Proceedings of the Transportation Research Board 83<sup>rd</sup> Annual Meeting, January 13, 2004, Washington, D.C., CD-ROM.
60. Yong Bai and \*Adel A. Hezam, "Integrating Innovative Project Delivery Methods into the Construction Curriculum," Proceedings of the 39<sup>th</sup> Annual Associated Schools of Construction International Conference, April 11, 2003, Clemson, South Carolina, pp. 119-127.
61. Yong Bai and Q. T. Cao, "Reducing Fatalities in Highway Construction Work Zones," Proceedings of 2003 Annual Meeting of the Southeast Institute for Decision Sciences Institute, February 26-28, 2003, Williamsburg, Virginia, pp. 367-369.

62. Yong Bai, "Improving Highway Work Zone Safety," Proceedings of Texas Section of American Society of Civil Engineers Fall Meeting, October 2-5, 2002, Waco, Texas, Page 1-10.
63. Yong Bai, "Innovative Project Delivery Methods," Proceedings of Texas Section of American Society of Civil Engineers Spring Meeting, March 28-31, 2001, San Antonio, Texas, pp. 21-30.
64. Yong Bai, "Quality Control for Robotic Bridge Painting," Proceedings of Texas Section of American Society of Civil Engineers Spring Meeting, April 5-8, 2000, Austin, Texas, pp. 1-10.
65. Yong Bai, "Robotic Steel Bridge Painting System," the Fourth International Symposium on Structural Engineering for Young Experts, August 26-29, 1996, Tsinghua University, Beijing, China, pp. 303-309.
66. Yong Bai and Leonhard E. Bernold, "Development of a Robotic Bridge Painting System," the Second Conference on Robotics for Challenging Environments, June 1-6, 1996, ASCE, Reston, Virginia, pp. 185-191.

**Research Reports (\* indicates my students):**

1. Wang, Ming-Heng, Schrock, Steven D., Bai, Yong, and Rescot, Robert A., "Evaluation of Innovative Traffic Safety Devices at Short Term Work Zones," Final Report on Research Supported by Kansas Department of Transportation, August 2013, 137 pp.
2. Steven D. Schrock, Eric J. Fitzsimmons, Ming-Heng Wang, and Yong Bai, "Proposed Positive Protection Guidance for Kansas: Synthesis of Work Zone Positive Protection Devices and State of Practice," Final Report on Research Supported by Kansas Department of Transportation, February 2013, 78 pp.
3. \*Margaret "Rita" Neff and Yong Bai, "Developing a Multi-Modal freight Movement Plan for the Sustainable Growth of Wind Energy Related Industries," Final Report on Research Sponsored by the Mid-America Transportation Center/U.S. Department of Transportation Research and Innovative Technology Administration, June 2012, 34 pp.
4. Yong Bai and \*Yilei Huang, "Determining the Effectiveness of Graphic-aided Dynamic Message Signs in Highway Work Zones," Final Report on Research Supported by Kansas Department of Transportation, May, 2012, 169 pp.
5. Yilei Huang\* and Yong Bai, "Field Experiments for Comparing the Effectiveness of Graphics Displayed in a Portable Changeable Message Sign in Highway Work Zones," Final Report on Research Sponsored by KU Transportation Research Institute, Kansas Department of Transportation, and Federal Highway Administration, January 2012, 52 pp.



6. \*Margaret "Rita" Neff, Yong Bai, Steven Schrock, and Tom Mulinazzi, "Developing a Sustainable Freight Transportation Framework with the Consideration of Improving Safety and Minimizing Carbon Emissions," Final Report on Research Sponsored by the Mid-America Transportation Center/U.S. Department of Transportation Research and Innovative Technology Administration, September 2011, 81 pp.
7. \*Yue Li, Yong Bai, Steven Schrock, and Tom Mulinazzi, "Modeling Truck Speed in the Upstream of One-lane Two-way Highway Work Zones: Implications on Reducing Truck-Related Crashes in Work Zones," Final Report on Research Sponsored by the Mid-America Transportation Center/U.S. Department of Transportation Research and Innovative Technology Administration, July 2011, 83 pp.
8. Yong Bai, \*Yilei Huang, Steven Schrock, and \*Yue Li, "Determining the Effectiveness of Graphic-aided Dynamic Message Signs in Work Zone," Final Report on Research Sponsored by the Smart Work Zone Deployment Initiative, Iowa Department of Transportation, and Federal Highway Administration, July 2011, 140 pp.
9. Steven D. Schrock, Kevin Heaslip, Ming-Heng Wang, Romika Jasrotia, Robert Rescot, Yong Bai, Brandon Brady, "Closed Course Testing of Portable Rumble Strips to Improve Truck Safety at Work Zones," Final Report on Research Sponsored by the Mid-America Transportation Center/U.S. Department of Transportation Research and Innovative Technology Administration, January 2010, 50 pp.
10. Yong Bai, Steven D. Schrock, Thomas E. Mulinazzi, \*Wenhua Hou, \*Chunxiao Liu, and \*Umar Firman, "Estimating Highway Pavement Damage Costs Attributed to Truck Traffic," Final Report on Research Sponsored by the Mid-America Transportation Center/U.S. Department of Transportation Research and Innovative Technology Administration, December 2009, 156 pp.
11. \*Erin Wurfel, Yong Bai, Luke Huan, and \*Vince Buhr, "Freight Analysis Framework for Major Metropolitan Areas in Kansas," Final Report on Research Sponsored by Kansas Department of Transportation, November 2009, 139 pp.
12. Yong Bai "U.S.-China Workshop: Rapid Bridge Replacement after Extreme Events," Final Report on Research Sponsored by the National Science Foundation under Grant Number 0728954, September 2009, 21 pp.
13. Yong Bai, \*Umar Firman, Luke Huan, and \*Xiaohong Wang, "Development of a Work Zone Training Program," Final Report on Research Sponsored by the Smart Work Zone Deployment Initiative, Iowa Department of Transportation, and Federal Highway Administration, August 2009, 85 pp.
14. Steven D. Schrock, Fei See Chen, Jamila Saadi, Wai Kiong Chong, and Yong Bai, "Evaluation of Technology-Enhanced Flagger Devices: Focus Group and Survey Studies in Kansas," Final Report on Research Sponsored by the Smart Work Zone Deployment

Initiative, Iowa Department of Transportation, Federal Highway Administration, April 2009, 56pp.

15. \*Li, Y., Chan, M., \*Firman, U., \*Finger, K., \*Mills, M. M., Bai, Y. Schrock, S. D., Chong, O., Atchley, P., and Perlmutter, D. D., "Improving Highway Work Zone Safety," Final Report on Research Sponsored by KU Transportation Research Institute, Kansas Department of Transportation, Federal Highway Administration, January 2009, 196 pp.
16. Yong Bai and \*Yingfeng Li, "Reducing Work Zone Crashes by Using Vehicle's Flashers as a Warning Sign," Final Report on Research Sponsored by Kansas Department of Transportation, January 2009, 144 pp.
17. Yong Bai, Jun Huan, and \*Abhinav Peddi, "Development of Human Poses for the Determination of On-site Construction Productivity in Real-time," Final Report on Research Sponsored by the National Science Foundation under Grant Number 0741374, December 2008, 90 pp.
18. \*Erin Wurfel, Luke Huan, Yong Bai, and \*Vincent Buhr, "Development of Freight Analysis Framework for the Sustainable Economic Growth," Final Report on Research Sponsored by KU Transportation Research Institute, Kansas Department of Transportation, and Federal Highway Administration, September 2008, 84 pp.
19. Yong Bai and \*Seonghoon Kim, "Development of a Wireless Real-Time Productivity Measurement System for Rapid Bridge Replacement," Final Report on Research Sponsored by KU Transportation Research Institute, Kansas Department of Transportation, Federal Highway Administration, January 2008, 180 pp.
20. Yong Bai and \*Yingfeng Li, "Determining Major Causes of Highway Work Zone Accidents in Kansas-Phase II," Final Report on Research Sponsored by Kansas Department of Transportation, October 2007, 134 pp.
21. Yong Bai, Patricia Oslund, Tom Mulinazzi, \*Shyamala Tamara, \*Chunxiao Liu, \*Michael M. Barnaby, and \*Christine E. Atkins, "Transportation Logistics and Economics of the Processed Meat and Related Industries in Southwest Kansas," Final Report, Kansas Department of Transportation Research Project KAN41380, July 2007, 378 pp.
22. Thomas E. Glavinich and Yong Bai, "The Emergence of the IBS Contractor," Final Report, Project Number FND43000, ELECTRI International, December 2006, 67 pp.
23. Yong Bai, "Development of a Knowledge Based System for Highway Bridge Repair and Replacement," Final Report, New Faculty General Research Fund, Kansas University Center for Research, July 2006, 61 pp.
24. Tom Mulinazzi, Pareicia Weaver, Yong Bai, Mehrdad Givechi, Justin Dorsey, Abhishek A. Joshi, Collin Koranda, and \*Yingfeng Li, "Energy Use in the Transportation Sector:

Trends and Strategies for Reduction in Use,” Final Report, Kansas Energy Council Project KAN43401, June 2006, 164 pp.

25. Yong Bai and \*Yingfeng Li, “Determining Major Causes of Highway Work Zone Accidents in Kansas,” Final Report, Kansas Department of Transportation Research Project KAN37040, June 2006, 168 pp.
26. Burkett, W. R., Nash, P. T., Yong Bai, Cal Hays, and Cindy Jones, “Rapid Bridge Replacement Techniques,” Final Report, Texas Department of Transportation Research Project 0-4568-1, July 2004, 210 pp.

**Oral Presentations:**

1. “Integrating Co-op Program into Construction Engineering Curriculum,” NSF sponsored online workshop: Next-generation Learning-centered Environment for Architecture, Engineering, and Construction (AEC) Education, Nov. 15, 2021 (Invited presentation).
2. “Using Drones to Determine Site Elevation,” 2021 Southeast Wisconsin Transportation Symposium, Organized by UWM Institute for Physical Infrastructure and Transportation, and Wisconsin Department of Transportation, UWM, Milwaukee, Oct. 8, 2021 (Invited presentation).
3. “ASCE Construction Engineering Education Committee: Force of Advancement at the Global Stage,” 2020 Virtual Global Leadership Forum for Construction Engineering and Management, June 10, 2020.
4. “Determination of Construction Site Elevations Using Drone,” School of Economics and Management Engineering, Beijing University of Civil Engineering and Architecture, Beijing, China, May 27, 2019. (Invited presentation).
5. “Determination of Construction Site Elevations Using Drone,” School of Management Science and Engineering, Central University of Finance and Economics, Beijing, China, May 27, 2019. (Invited presentation).
6. “Construction Engineering Education Committee: Past, Present, and Future,” 2018 Construction Research Council Business Meeting, New Orleans, LA, April 4, 2018.
7. “Integrating the Co-op Program with Construction Engineering Education,” ASCE/CI Summit 2018, Fort Worth, Texas, March 1<sup>st</sup>, 2018.
8. “On-site Labor Efficiency Improvement for Rapid Bridge Replacement,” School of Management Science and Engineering, Central University of Finance and Economics, Beijing, China, April 22, 2016. (Invited presentation).
9. “Enhancing Highway Work Zone Safety Using Portable Changeable Message Signs,” the 2015 International Conference on Construction and Real Estate Management, August 11, 2015, Lulea, Sweden (keynote speech).

10. "Enhancing Bridge Replacement Efficiency," School of Civil Engineering and Mechanics, Huazhong University of Science and Technology, Wuhan, China, November 11, 2014 (Invited presentation).
11. "Comparison of Construction Labor Productivity between U.S. and China: Using On-Site Productivity Measurement Methods," College of Architecture and Civil Engineering, Beijing University of Technology, Beijing, China, November 6, 2014 (Invited presentation).
12. "Development of US Construction Management Practices: From Post WWII to Present," The 4<sup>th</sup> Conference on Management Innovation in the Chinese Construction Industry, Kunming, China, September 26, 2014 (Keynote Speech).
13. "Improving Highway Work Zone Safety," College of Urban and Environmental Sciences, Peking University, May 28, 2014, Beijing, China (Invited presentation).
14. "Determining Drivers' Acceptance of Graphic-aided Portable Changeable Message Signs in Highway Work Zones," the 10<sup>th</sup> Asia Pacific Transportation Development Conference, May 25, 2014, Beijing, China (Invited presentation).
15. "Sustainable Construction: Past, Present, and Future," the 2nd Biennial Conference on Sustainable Business, Energy and Development in Asia, March 17, 2014, Hiroshima, Japan.
16. "Risk Allocation and Dispute Resolution Mechanism in Chinese Public Projects: An Empirical Study," the 2013 International Conference on Construction and Real Estate Management, October 10, 2013, Karlsruhe, Germany (keynote speech).
17. "Rapid Bridge Replacement Techniques after Extreme Events," College of Engineering Management, Shandong Jinzhu University, China, September 17, 2013 (Invited presentation).
18. "Enhancing Bridge Construction Efficiency," the 26<sup>th</sup> ICPTA Annual Conference, Tampa, Florida, May 26, 2013.
19. "Determining Drivers' Acceptance of Using Graphics on Portable Changeable Message Signs in Highway Work Zones," the 9<sup>th</sup> Asia Pacific Transportation Development Conference, Chongqing, China, June 30, 2012,
20. "Estimating Highway Pavement Damage Costs Attributed to Truck Traffic," Mid-America Transportation Center Webinar Series: *Built to Last: Sustainable Pavement Design, Construction and Maintenance*, February 16, 2012 (Invited presentation).

21. "The Development of the Chinese Construction Industry after the Cultural Revolution," 2012 International Seminar for Faculty, the International Programs, University of Kansas, January 27, 2012.
22. "Labor Productivity Comparison between Chinese and U.S. Building Construction Projects," 2011 International Conference on Construction and Real Estate Management, Guangzhou, China, November 19, 2011 (Invite keynote speech).
23. "Emerging Technologies in Construction," School of Management, Harbin Institute of Technology, Harbin, China, June 7<sup>th</sup>, 2011 (Invited presentation).
24. "Tsinghua University and Its Impact on Chinese Society," Forum on Higher Education in China, KU Center for East Asian Studies and the Tsinghua Alumni Association of Greater Kansas City Area, The University of Kansas, May 7<sup>th</sup>, 2011.
25. "Research on Highway Work Zone Safety in the United States," Department of Civil Engineering, Tsinghua University, Beijing, China, April 20<sup>th</sup>, 2011 (Invited presentation).
26. "Overview of the Chinese Construction Industry," Science and Practice of Civil, Environmental, and Architectural Engineering, Professional Developing Series, Kansas City, March 14, 2011.
27. "Determining the Effectiveness of Graphic-aided Portable Changeable Message Signs in Highway Work Zones," the 14<sup>th</sup> Annual COTA/WCTA Symposium on Transportation Operations and Planning in Mega-Regions, Washington D.C., January 23<sup>rd</sup>, 2011.
28. "Determining Major Causes of Highway Work Zone Accidents in Kansas," Research Program Council Meeting, Kansas Department of Transportation, Topeka, Kansas, October 1<sup>st</sup>, 2010 (Invited presentation).
29. "Challenges of Sustainable Freight Transportation: Carbon Emission, Congestion, and Safety," School of Economics and Management, Shanghai Maritime University, Shanghai, China, August 21<sup>st</sup>, 2010 (Invited presentation).
30. "Improving Work Zone Safety Using Portable Changeable Message Sign," the 8<sup>th</sup> Asia Pacific Transportation Development Conference, May 29<sup>th</sup>, 2010, Taiwan.
31. "Development of Empirical Models to Estimate Pavement Damage Cost Attributed to Truck Traffic," the 8<sup>th</sup> Asia Pacific Transportation Development Conference, May 28<sup>th</sup>, 2010, Taiwan.
32. "Freight Analysis Framework for Major Metropolitan Areas in Kansas," Research Program Council Meeting, Kansas Department of Transportation, Topeka, Kansas, March 25<sup>th</sup>, 2010 (Invited presentation).

33. "Enhancing the Capability of Bridge Construction Using the WRITE System," the 89th Transportation Research Board Annual Meeting, Washington, D.C., January 12, 2010.
34. "Determining Pavement Damage Cost Attributed to Truck Traffic in Southwest Kansas," the 2009 Mid-Continent Transportation Research Symposium, Ames, Iowa, August 20, 2009.
35. "Determine Real-time Labor Productivity for Rapid Bridge Construction," School of Naval Architecture, Ocean and Civil Engineering, Shanghai Jiao Tong University, Shanghai, China, June 8<sup>th</sup>, 2009 (Invited presentation).
36. "Determining Real-Time Construction Productivity for Enhancing the Capability of Bridge Replacement," School of Management, Harbin Institute of Technology, Harbin, China, June 5<sup>th</sup>, 2009 (Invited presentation).
37. "Enhancing the Capability of Rapid Bridge Replacement," School of Civil Engineering, Tsinghua University, Beijing, China, June 2<sup>nd</sup>, 2009 (Invited presentation).
38. "Determining Real-time Construction Productivity for Enhancing the Capability of Rapid Bridge Replacement," Department of Computer Science and Electrical Engineering, University of Missouri at Kansas City, April 24, 2009 (Invited presentation).
39. "Measuring Construction Productivity Using the WRITE System," 2009 Construction Research Congress, ASCE, Seattle, Washington, April 6, 2009.
40. "Development of Human Pose Analyzing Algorithms for the Determination of Construction Productivity in Real-time," 2009 Construction Research Congress, ASCE, Seattle, Washington, April 5, 2009.
41. "Reducing Work Zone Crashes by Using Emergency Flasher Traffic Control Device," the 88th Transportation Research Board Annual Meeting, Washington, D.C., January 12, 2009.
42. "Reducing Work Zone Crashes by Using Vehicle's Flashers as a Warning Sign," Research Program Council Meeting, Kansas Department of Transportation, Topeka, Kansas, October 22<sup>nd</sup>, 2008 (Invited presentation).
43. "Modern Bridges of China," Center for East Asian Studies, University of Kansas, Lawrence, Kansas, October 9<sup>th</sup>, 2008 (Invited presentation).
44. "Conducting Business Overseas: Strategies for US A/E/C Firms," Science and Practice of Civil, Environmental and Architectural Engineering, Professional Developing Series, Kansas City, April 28, 2008.

45. "Transportation Logistics and Economics of the Processed Meat and Related Industry in Southwest Kansas," Research Program Council Meeting, Kansas Department of Transportation, Topeka, Kansas, April 9<sup>th</sup>, 2008 (Invited presentation).
46. "Rapid Bridge Replacement: Processes, Techniques, and Needs for Improvements," NSF Workshop: Rapid Bridge Replacement after Extreme Events. Beijing, China, October 1<sup>st</sup>, 2007.
47. "Determining the Effectiveness of Temporary Traffic Control Measures in Highway Work Zones," Mid-Continent Transportation Symposium, Ames, Iowa, August 17, 2007.
48. "Investigating the Impacts of Human Factors on Severe Crashes in Highway Work Zones," Mid-Continent Transportation Symposium, Ames, Iowa, August 17, 2007.
49. "Evaluating Student Learning Using Pre- and Post-course Assessment," 2007 ASEE Annual Conference and Exposition, Honolulu, Hawaii, June 25, 2007.
50. "Comparison of Contract General Conditions: U.S. AIA-A201 vs. China GF-1999-0201," 2007 Construction Research Congress, ASCE, Grand Bahama Island, May 6, 2007.
51. "Process and Techniques for Rapid Bridge Replacement after Extreme Events," the 86th Annual TRB Meeting, Washington, D.C., January 23, 2007.
52. "Investigating the Characteristics of Fatal Crashes in the Highway Construction Zones," Global Unity for Safety & Health in Construction, CIB International Conference, Beijing, China, June 26 - 30, 2006.
53. "Rapid Bridge Replacement after Extreme Events," Faculty of Civil Engineering, Chongqing University, Chongqing, China, June 23, 2006 (Invited presentation).
54. "Construction Education and Research in the United States," Faculty of Civil Engineering, Chongqing University, Chongqing, China, June 22, 2006 (Invited presentation).
55. "Rapid Bridge Replacement Techniques," Science and Practice of Civil, Environmental and Architectural Engineering, Professional Developing Series, Kansas City, February 20<sup>th</sup>, 2006.
56. "Rapid Bridge Replacement Techniques," Department of Bridge Engineering, Tongji University, Shanghai, China, January 5<sup>th</sup>, 2006 (Invited presentation).
57. "Rapid Bridge Replacement after an Extreme Event," International Association for Bridge and Structural Engineering Symposium on Structures and Extreme Events, Lisbon, Portugal, September 16, 2005.

58. "Rapid Bridge Replacement after an Extreme Event," the 84<sup>th</sup> Annual TRB Meeting, Washington, D.C., January 12, 2005 (with Dr. William R. Burkett from Texas Tech University).
59. "Similarities between China and the United States," Center for East Asian Studies, University of Kansas, Lawrence, Kansas, October 20, 2004.
60. "Improving Highway Work Zone Safety," Science and Practice of Civil, Environmental, and Architectural Engineering, Professional Developing Series, Kansas City, April 19, 2004.
61. "Lessons Learned from I-40 Webbers Falls Bridge Tragedy," the 83<sup>rd</sup> Annual TRB Meeting, Washington, D.C., January 13, 2004.
62. "Integrating Innovative Project Delivery Methods into the Construction Curriculum," the 39<sup>th</sup> Annual Associated Schools of Construction International Conference, Clemson, South Carolina, April 11, 2003.
63. "Improving Highway Work Zone Safety," Texas Section of American Society of Civil Engineers Fall Meeting, Waco, Texas, October 2-5, 2002.
64. "Innovative Project Delivery Methods," Texas Section of American Society of Civil Engineers, Spring Meeting, San Antonio, Texas, March 28-31, 2001.
65. "Enhancing Safety through the Life Cycle of Pavement," Research Management Committee Meeting, Texas Department of Transportation, San Antonio, Texas, November 8, 2001 (Invited presentation).
66. "Quality Control for Robotic Bridge Painting," Texas Section of American Society of Civil Engineers Spring Meeting, Austin, Texas, April 5-8, 2000.

**Poster Presentations:**

1. "Sidewalk Trip Hazard Detection Using a Low-Cost LiDAR Scanner and Deep Learning," the 101<sup>st</sup> Transportation Research Board Annual Meeting, January 11, 2022, Washington, D.C.
2. "Energy Harvesting Assessment Using PZT Sensors and Roadway Materials," the 97<sup>th</sup> Transportation Research Board Annual Meeting, January 9, 2018, Washington, D.C.
3. "Effectiveness of Graphic-Aided Portable Changeable Message Signs in Reducing Vehicle Speeds in Highway Work Zones," the 92<sup>nd</sup> Transportation Research Board Annual Meeting, January 14, 2013, Washington, D.C.
4. "Determining Significant Factors for Earthmoving in Bridge Construction," the 92<sup>nd</sup> Transportation Research Board Annual Meeting, January 15, 2013, Washington, D.C.



5. "Determining the Optimal Deployment Location of a Portable Changeable Message Sign in the Upstream of Work Zones," the 91<sup>st</sup> Transportation Research Board Annual Meeting, January 23, 2012, Washington, D.C.
6. "Highway Construction Productivity Measurement Using a Wireless Real-time Productivity Measurement System," the 90<sup>th</sup> Transportation Research Board Annual Meeting, January 24, 2011, Washington, D.C.
7. "Determining the Effectiveness of PCMS on Reducing Vehicle Speed in Rural Highway Work Zones," the 89<sup>th</sup> Transportation Research Board Annual Meeting, January 12, 2010, Washington, D.C.
8. "Improving On-site Construction Productivity Using the WRITE System," 2009 Mid-Continent Transportation Research Symposium, August 20, 2009, Ames, Iowa.
9. "Determining Motorists' Response to Signage in Rural Highway Work Zones," the 88<sup>th</sup> Transportation Research Board Annual Meeting, January 12, 2009, Washington, D.C.
10. "Development of a Wireless Real-time Productivity Measurement System for Bridge Construction," the 88<sup>th</sup> Transportation Research Board Annual Meeting, January 12, 2009, Washington, D.C.
11. "Effectiveness of Temporary Traffic Control Measures in Highway Work Zones," the 87<sup>th</sup> Transportation Research Board Annual Meeting, January 14, 2008, Washington, D.C.
12. "Fatal and Injury Characteristics in Highway Work Zones," the 87<sup>th</sup> Transportation Research Board Annual Meeting, January 14, 2008, Washington, D.C.
13. "Development of Crash-Severity-Index Models based on Work Zone Crash Severity Analyses," the 87<sup>th</sup> Transportation Research Board Annual Meeting, January 14, 2008, Washington, D.C.

**Research Grants:**

1. "I-Corps: Automated As-is Facade Modeling of High-rise Buildings Using Drones and Artificial Intelligence," NSF (Award No. 2224104), May 15 to Oct. 31, 2022, \$50,000 (Principal Investigator).  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=2224104&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=2224104&HistoricalAwards=false)
2. "Applications of FRP Composite Materials in Civil Infrastructures," Jan. 1 to Dec. 31, 2017, Legacy Initiative (LI) Grant, Opus College of Engineering, Marquette University (Co-investigator).
3. "Developing a Multi-modal Freight Movement Plan for the Sustainable Growth of Wind Energy Related Industries," Sept. 1<sup>st</sup>, 2011 to June 30, 2012, Mid-America

Transportation Center/Federal Highway Administration, \$15,000 (Principal Investigator).

4. "Determining the Effectiveness of Graphic-aided Dynamic Message Signs in Urban Highway Work Zones," August 22, 2011 to May 31, 2012, Kansas Department of Transportation, \$9,000 (Principal Investigator).
5. "Field Experiments for Comparing the Effectiveness of Graphics Displayed in a Portable Changeable Message Sign in Highway Work Zones," May 15, 2011 to November 14, 2011, KU Transportation Research Institute/Kansas Department of Transportation/Federal Highway Administration, \$10,800 (Principal Investigator).
6. "Developing a Sustainable Freight Transportation Framework with the Consideration of Improving Safety and Minimizing Carbon Emission," July 1<sup>st</sup> 2010 to June 30, 2011, Mid-America Transportation Center/Federal Highway Administration, \$65,000 (Principal Investigator).
7. "Determining the Effectiveness of Graphic-aided Dynamic Message Signs in Work Zone," July 1<sup>st</sup>, 2010 – June 30, 2011, Iowa State Department of Transportation/Federal Highway Administrative, \$47,588 (Principal Investigator).
8. "Development of Improved Positive Protection and Exposure Control for Work Zones," Sept. 1<sup>st</sup>, 2009 to August 31<sup>st</sup>, 2010, Kansas Department of Transportation, \$60,000 (Co-investigator with Steven Schrock, PI).
9. "Modeling Truck Speed in the Upstream of Two-lane Highway Work Zones: Implications on Reducing Truck-related Crashes in Work Zones," July 1<sup>st</sup> 2009 to June 30, 2010, Mid-America Transportation Center/Federal Highway Administration, \$77,187 (Principal Investigator).
10. "Development of an Interactive E-Training Program for Work Zone Safety and Mobility," August 15, 2008-February 14, 2010, Kansas Department of Transportation, \$60,000 (Principal Investigator).
11. "Evaluation of Innovative Traffic Safety Devices at Short Term Work Zones," Sept. 1st, 2008 – June 30<sup>th</sup>, 2010, Kansas Department of Transportation, \$60,000 (Co-investigator with Steven Schrock, PI).
12. "Estimating Highway Pavement Damage Costs Attributed to Truck Traffic," July 1<sup>st</sup> 2008 to June 30, 2009, Mid-America Transportation Center/Federal Highway Administration, \$60,000 (Principal Investigator).
13. "Closed Course Testing of Portable Rumble Strips to Improve Truck Safety at Work Zones," July 1<sup>st</sup>, 2008 to June 30, 2009, Mid-America Transportation Center, \$60,000 (Co-investigator with Steven Schrock, PI).

14. "Development of a Work Zone Training Program," July 1<sup>st</sup>, 2008 – June 30, 2009, Iowa State Department of Transportation/Federal Highway Administrative, \$30,000 (Principal Investigator).
15. "Development of Human Poses for the Determination of on-site Construction Productivity in Real Time," October 2007 – September 2008, NSF (Award No. 0741374), \$10,000 (Principal Investigator).  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=0741374&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=0741374&HistoricalAwards=false)
16. "Workshop: Rapid Bridge Replacement after Extreme Events," October 2007 – September 2008, NSF (Award No. 0728954), \$33,660 (Principal Investigator).  
[https://www.nsf.gov/awardsearch/showAward?AWD\\_ID=0728954&HistoricalAwards=false](https://www.nsf.gov/awardsearch/showAward?AWD_ID=0728954&HistoricalAwards=false)
17. "Freight Analysis Framework for Major Metropolitan Areas in Kansas," September 2007-December 2008, Kansas Department of Transportation, \$50,000 (Principal Investigator).
18. "Evaluation of Technology – Enhanced Flagger Devices," July 1<sup>st</sup>, 2007 – June 30, 2008, Iowa Department of Transportation/Federal Highway Administration, \$52,836 (Co-investigator with Steven Schrock, PI).
19. "Improving Highway Work Zone Safety," August 16, 2007 – August 15, 2008, KU Transportation Research Institute/Kansas Department of Transportation/Federal Highway Administration, \$180,000 (Principal Investigator).
20. "Development of Freight Analysis Framework for the Sustainable Economic Growth," August 16, 2007 – August 15, 2008, KU Transportation Research Institute/Kansas Department of Transportation/Federal Highway Administration, \$55,000, (Co-investigator with Luke Huan, PI).
21. "Reducing Work Zone Crashes by Using Vehicle's Flashers as a Warning Sign," August 2006-January 2008, Kansas Department of Transportation, \$58,000 (Principal Investigator).
22. "Development of a Wireless Real-Time Productivity Measurement System for Rapid Bridge Replacement," August 2006 - August 2007, KU Transportation Research Institute/Kansas Department of Transportation/Federal Highway Administration, \$50,000 (Principal Investigator).
23. "Improvement of Bridge Replacement Capability after Extreme Events," General Research Fund, Kansas University Center for Research, August 2006 - December 2006, \$5,000 (Principal Investigator).

24. "Energy Use in the Transportation Sector in Kansas: Trends and Strategies for Reduction in Use-Phase II," May 2006 - July 2006, Kansas Energy Council, \$22,500 (Co-investigator with Thomas E. Mulinazzi, PI, Pareicia Weaver, and Mehrdad Givechi).
25. "Energy Use in the Transportation Sector in Kansas: Trends and Strategies for Reduction in Use," March 2006 - July 2006, Kansas Energy Council, \$22,500 (Co-investigator with Thomas E. Mulinazzi, PI, Pareicia Weaver, and Mehrdad Givechi).
26. "Emergence of the IBS Contractor," January 2006 - December 2006, ELECTRI International, \$53,900 (Co-investigator with Thomas E. Glavinich, PI).
27. "Determining Major Causes of Highway Work Zone Accidents in Kansas-Phase II," January 2006 - December 2006, Kansas Department of Transportation, \$40,000 (Principal Investigator).
28. "Transportation Logistics and Economics of the Processed Meat and Related Industries in Southwest Kansas," July 2005 - August 2006, Kansas Department of Transportation, \$50,000 (Principal Investigator).
29. "Grounding Mobile Construction Equipment for Safety- Phase II," January 2005 - December 2005, ELECTRI International, \$92,400 (Co-investigator with Thomas E. Glavinich, PI).
30. "Emerging Photovoltaic Market," January 2005 - December 2005, ELECTRI International, \$57,300 (Co-investigator with Thomas E. Glavinich, PI).
31. "Determining Major Causes of Highway Work Zone Accidents in Kansas," July 2004 - January 2006, Kansas Department of Transportation, \$48,000 (Principal Investigator).
32. "Development of a Knowledge Based System for Highway Bridge Repair and Replacement," July 2004 - July 2006, New Faculty General Research Fund, Kansas University Center for Research, \$7,800 (Principal Investigator).
33. "Capabilities/Limitations and Recommendations for Transporting TxDOT's Heavy-Duty Off-Road Construction and Maintenance Equipment Fleet," September 2003 - August, 2005, Texas Department of Transportation, \$150,000 (Co-investigator with William D. Lawson, PI, and Michael Leaverton).
34. "Rapid Bridge Replacement Techniques," March 2002 - August 2003, Texas Department of Transportation (DOT), Federal Highway Administration, Georgia DOT, Illinois DOT, Iowa DOT, Minnesota DOT, Mississippi DOT, New Jersey DOT, Ohio DOT, South Carolina DOT, \$181,650 (Co-investigator with William R. Burkett, PI, and Phillip T. Nash).

**Software and Equipment Grants:**

1. Acquisition of Apollyon Sensors for Highway Work Zone Experiments, \$8,363, Transportation Research Institute, The University of Kansas, November 2009.

2. Acquisition of SmartSensors for Highway Work Zone Experiments, \$20,208, KU Transportation Research Institute/Kansas Department of Transportation/Federal Highway Administration, March 2007.
3. Primavera P3e/c for Construction Software, \$276,000, Primavera Systems, Inc., Bala Cynwyd, PA, February 2004.
4. Equipment Grant, \$1,000, QUOIN Foundation, Dallas, TX, February 2003.
5. Primavera Expedition 8.0 software, \$5,000, Primavera Systems, Inc., Bala Cynwyd, PA, June 2002.
6. Equipment Grant, \$5,000, QUOIN Foundation, Dallas, TX, February 2002.

**NSF I-Corps Program:**

“Automated As-Is Façade Modeling of Historic High-Rise Buildings Using Drone and AI,” Oct. 18 to Nov. 15, 2021, at the NSF Milwaukee I-Corps Site. Team members: Dr. Yong Bai, Dr. Yuhan Jiang (formerly Ph.D. student), and Sahara Adhikari (graduate student in construction engineering).

**Courses Taught at Marquette University:**

CNEN 3810 Introduction to Construction Management, Spring 2022-2023  
 CNEN 3860 Construction Methods and Materials, Fall 2017-2019, 2021-2022  
 CNEN 4815/CEEN 5815 Mechanical and Electrical Systems for Buildings, Spring 2023  
 CNEN 4830/CEEN 5830 Construction Planning, Scheduling and Control, Fall 2016-2022  
 CNEN 4840/CEEN 5840 Construction Cost Analysis and Estimating, Spring 2017-2023  
 CNEN 4845/CEEN 5845 Construction Equipment and Methods, Fall 2020-2022  
 CEEN 4995 Independent Study in Construction Engineering, Spring 2020, Fall 2020, Spring 2022  
 CEEN 6995 Independent Study in Civil Engineering, Fall 2017, Spring 2018, 2020, 2022  
 CEEN 8995 Independent Study in Civil Engineering, Fall 2018

**Courses Taught at North Dakota State University:**

UNIV 189 Skills for Academic Success at NDSU, Fall 2012-2015  
 CM&E 488 Construction Management Capstone, Spring 2013-2014  
 CM&E 489 Construction Design Capstone, Fall 2012, Spring 2013-2015  
 CM&E 710 Managing for Quality in Construction Organizations, Spring 2014  
 CM&E 715 Construction Specifications and Contracts, Spring 2016  
 CM&E 725 Decision Making and Risk Analysis, Summer 2015  
 CM&E 790 Graduate Seminar, Spring 2013-2016

**Courses Taught at The University of Kansas:**

ARCE 681 Architectural Engineering Design II, Spring 2004-2006  
 CMGT 400 Construction Administration, Spring 2007  
 CMGT 410 Construction Cost and Methods, Fall 2004-2005

CMGT 500	Construction Engineering, Spring 2008-2012
CMGT 609	International Construction Management, Fall 2006-2008
CMGT 700	Construction Project Management, Spring 2008-2011
CMGT 701	Construction Planning and Scheduling, Spring 2004, 2010 and 2012; Fall 2005 and 2008
CMGT 702	Construction Equipment and Methods, Fall 2003, 2006-2007, 2010, Spring 2005
CMGT 703	Construction Quality, Productivity, and Safety, Fall 2009 and Spring 2011
CMGT 704	Construction Estimating and Bidding, Fall 2009 and 2011
CMGT 801	Directed Reading in Construction Management, regular basis
CMGT 802	Special Problems in Construction Management, regular basis
CMGT 895	Construction Management Project, regular basis

**Courses Taught at Texas Tech University:**

CTEC 1312	Construction Materials and Methods, Fall 1999-2002
CTEC 4270	Capstone Design, Fall 2001-2002
CTEC 4321	Construction Contracts and Specifications, Spring 2000-2003
CTEC 4341	Construction Management, Spring 2000-2003
CTEC 4342	Cost Estimating, Fall 1999-2002
GTEC 1211	Computer Programming, Fall 2000-2001
GTEC 4322	Cost/Profit Analysis, Spring 2001-2003

**Short Courses Taught:**

1. "Construction Safety Management," School of Management and Engineering, Shandong Jianzhu University, China, Nov. 27-Dec. 26, 2020. (Online Course)
2. "New Advancements in Construction Engineering and Management," School of Business, Guangzhou University, China, Oct. 8-10, 2018.
3. "New Advancements in Construction Engineering and Management," School of Business, Guangzhou University, China, Nov. 22-24, 2017.
4. "Construction Project Management," School of Management and Engineering, Shandong Jianzhu University, China, April 18-19, 2016.
5. "Construction Contracts and Specifications," School of Management and Engineering, Shandong Jianzhu University, China, April 20-21, 2016.
6. "Introduction to Construction Management," School of Management and Engineering, Shandong Jianzhu University, China, Sept. 24-25, 2015.
7. "Sustainable Construction," College of Architecture and Civil Engineering, Beijing University of Technology, China, May 13-19, 2015.
8. "Introduction to Construction Management," School of Management and Engineering, Shandong Jianzhu University, China, Sept. 22-24, 2014.
9. "Introduction to Construction Management," School of Management and Engineering, Shandong Jianzhu University, China, Sept. 17-18, 2013.
10. "Construction Safety," School of Management and Engineering, Shandong Jianzhu University, China, July 8-11, 2013.
11. "Construction Safety," School of Business, Guangzhou University, China, March 11-15, 2013.

12. "Advancements in Construction Management," School of Business, Guangzhou University, China, October 16-18, 2012.
13. "Advancements in Construction Management," Department of Construction and Real Estate, Harbin Institute of Technology, Harbin, China, June 3-9, 2011.
14. "Research and Development on Highway Work Zone Safety," Department of Civil Engineering, Tsinghua University, China, April 18-22, 2011.

**Teaching/Professional Training and Workshops:**

1. 2019 KEEN National Conference, Dallas, TX, Jan. 3-5, 2019.
2. "NSF Day at NDSU," NDSU and NSF, Fargo, ND, May 18, 2016.
3. "Resolving Discrimination and Harassment Complaints," Workshop for Administrators and Grievance Review Committee Members, NDSU, Fargo, ND, May 16, 2016.
4. "Dealing with Difficult People," Fred Pryor Seminars, a Division of Park University Enterprises, Inc., Fargo, ND, October 21, 2015.
5. "Developing Emotional Intelligence," Fred Pryor Seminars, a Division of Park University Enterprises, Inc., Fargo, ND, July 13, 2015.
6. "FORWARD Executive Leadership Workshop: Changing Academic Cultures," conducted by FastTrack Leadership, Inc., North Dakota State University, March 16, 2015.
7. "Developing a Research Program: Short Term and Long Term Strategies," The FORWARD Workshop, North Dakota State University, October 30, 2014.
8. NDSU Teaching and Learning Conference, "Second Language Learners and Plagiarism," North Dakota State University, August 20, 2014.
9. "Peer Review of Teaching," The FORWARD Workshop, North Dakota State University, January 8, 2014.
10. "Fostering a Collegial Department," The FORWARD Workshop, North Dakota State University, Nov. 6, 2013.
11. "Science: Becoming the Messenger," NSF/EPSCoR Communications Workshop, Fargo, ND, June 26, 2013.
12. "Anti-racism workshop," FORWARD, North Dakota State University, January 22, 2013.
13. "Mutual Mentoring: Moving Beyond One-Size-Fits-All Mentoring," The FORWARD Lecture Series, North Dakota State University, Nov. 8, 2012.
14. NDSU Teaching and Learning Conference, "Best Teaching Practices for Enhanced Learning," North Dakota State University, August 15, 2012.
15. School of Engineering Faculty Teaching Workshop: SCALE-UP: Student-Centered Active Learning Environment for Undergraduate Programs, by Lisa Benson and Bob Beichner, University of Kansas, January 19<sup>th</sup>, 2012.
16. KU Teaching Summit 2011, Teaching & Learning as a Community Enterprise, University of Kansas, August 18, 2011.
17. "Social Media in the Classroom and Beyond," Center for Teaching Excellence, University of Kansas, February 22, 2011.
18. School of Engineering Faculty Teaching Workshop: How Students Learn and How Teachers Teach, by Richard M. Felder and Rebecca Brent, University of Kansas, January 19<sup>th</sup>, 2011.
19. "Questions about Grading in an Age of Entitlement." Center for Teaching Excellence, University of Kansas, March 29<sup>th</sup>, 2010.
20. KU Teaching Summit 2009: Engaged Learning, University of Kansas, August 18, 2009.

21. "Hybrid Courses: Shifting Student Engagement." Center for Teaching Excellence, University of Kansas, March 31<sup>st</sup>, 2009.
22. KU Teaching Summit 2008: Making Learning Visible, University of Kansas, August 19, 2008.
23. "Student Evaluation of Teaching at KU," Center for Teaching Excellence, University of Kansas, March 24, 2008.
24. KU Teaching Summit 2007: Collaboration: Models, Processes and Tools to Build Community, University of Kansas, August 14, 2007.
25. 2006 Faculty Seminar, Center for Teaching Excellence, University of Kansas.
26. KU Teaching Summit 2006: Teaching and Learning in a Changing World, University of Kansas, August 15, 2006.
27. 2005 Best Practices Institute, Center for Teaching Excellence, University of Kansas.
28. "Representing Your Teaching for Reviews," Center for Teaching Excellence, University of Kansas, February 7, 2005.
29. KU Teaching Summit 2004: General Education: Establishing New Traditions of Learning, University of Kansas, August 17, 2004.
30. KU Teaching Summit 2003: The Engaged Learner, University of Kansas, August 19, 2003.
31. Teaching Engineering Faculty to Teach in an Active Learning Environment, Texas Tech University, Lubbock, Texas, September 11-14, 2000.

**Chair on Ph.D. Student Committees:**

1. **Sisi Han**, Ph.D., 2022-Present
2. **Yuhan Jiang**, Ph.D., August 2020  
Dissertation Title: Determination of Elevations for Excavation Operations Using Drone Technologies.
3. **Emad Nadi**, Ph.D., August 2019.  
Dissertation Title: Construction Labor Productivity Benchmarking: A Comparison Between On-site Construction and Prefabrication.
4. **Yilei Huang**, Ph.D., August 2012.  
Dissertation Title: Determine the Effectiveness of Graphic-aided Portable Changeable Message Signs in Highway Work Zones.
5. **Yue Li**, Ph.D., May 2011.  
Dissertation Title: Analyzing Drivers' Response to Portable Changeable Message Sign in Rural Highway Work Zones.
6. **Ka Wah Chui**, Ph.D., August 2010.  
Dissertation Title: Productivity Comparison between U.S. and Chinese Construction Firms.



7. **Seonghoon Kim**, Ph.D., December 2008.  
Dissertation Title: Development of a Wireless Real-Time Productivity Measurement System for Rapid Construction Operations.
8. **Yingfeng Li**, Ph.D., August 2007.  
Dissertation Title: Analyzing Highway Work Zone Crashes and Traffic Control Effectiveness.

**Chair on Master Student Committees:**

1. **Kieran Williams**, Master of Science in Civil Engineering, Fall 2022-present.
2. **Lydia Foust**, Master of Science in Civil Engineering, Fall 2022-present.
3. **Sahara Adhikari**, Master of Science in Civil Engineering, Jan. 2021-present.
4. **Sisi Han**, Master of Science in Civil Engineering, August 2020. Thesis Title: Using Drone-Based Fully Convolutional Network for the Determination of Construction Site Elevations.
5. **Asim Razzaq**, Master of Construction Management, Spring 2016.
6. **Brandon Bonderson**, Master of Construction Management, December 2015.
7. **Hilary R. Bryant Jr.**, Master of Construction Management, December 2015.
8. **Stephanie Boyce**, Master of Construction Management, August 2015.
9. **Prakash A. Chavda**, Master of Construction Management, August 2015.
10. **Rafal J. Trojniak**, Master of Construction Management, May 2012. Project Title: A Proposal: LEED for Construction–Sustainable Development Principles for Contractors.
11. **Edward Cezar**, Master of Construction Management, May 2012. Project Title: Project Management of the PSE&G Linden 138kV Breaker Replacement Project.
12. **Scott Eason**, Master of Civil Engineering, December 2011. Project Title: Recycling Concrete Aggregate.
13. **Shripad Adwalpakar**, Master of Science in Civil Engineering, August 2011. Project Title: Construction Safety Practices in U.S. and Japan.
14. **Yi Lan**, MSCE, December 2010. Thesis Title: The Expansion of Chinese Construction Companies in the Global Market.
15. **Joseph A. Hof**, Master of Construction Management, May 2010. Project Title: The Continued Vitality of Missouri’s Acceptance Doctrine.

16. **Yilei Huang**, MSCE, December 2009. Thesis Title: The Growth Trend of the Chinese Construction Industry: When it will Surpass the U.S. Construction Industry.
17. **Solomon Tesfay**, Master of Construction Management, December 2009. Project Title: Development of a Business Plan to Enter South Africa's Construction Market.
18. **Xiaohong Wang**, MS in Computer Science (Co-chair with Dr. Jun Huan), December 2009. Thesis Title: G-hash: Towards Fast Kernel-based Similarity Search in Large Graph Databases.
19. **Matthew R. Laipple**, Master of Construction Management, May 2009. Project Title: Life Cycle Cost Based Pavement Selection in Overland Park, Kansas.
20. **David Poirier**, Master of Construction Management, May 2009. Project Title: The Role of a Design Professional as Judge in Construction Disputes.
21. **Abhinav Peddi**, MS in Computer Engineering (Co-chair with Dr. Jun Huan), December 2008. Thesis Title: Development of Human Pose Analyzing Algorithms for the Determination of Construction Productivity in Real-time.
22. **Chunxiao Liu**, MSCE, December 2007. Thesis Title: Analyzing Highway Damage Costs Attributed to Truck Traffic of Processed Meat and Related Industries in Southwest Kansas.
23. **Chris W. Sprecker**, Master of Construction Management, May 2007. Project Title: A Construction Plan for Constructing a High-rise Mixed-use Building in Australia.
24. **Ka Wah Chui**: MS in Architectural Engineering, December 2006. Thesis Title: Comparison of Contract General Conditions between the United States and China.
25. **Shyamala Tamara**, MSCE, December 2006. Thesis Title: Determining VMT for the Processed Meat and Related Industries in Southwest Kansas.
26. **Calvan Nguyen LuuAbles**, Master of Construction Management, May 2006. Project Title: GPS Application on Earthmoving Operations.
27. **Bruce E. Palmer**, Master of Construction Management, May 2006. Project Title: The Impact of Value Analysis Engineering on an Education Center Project.
28. **Joshua D. Reeves**, Master of Construction Management, May 2004. Project Title: Performance Evaluations for the Construction Professional.
29. **Adel A. Hezam**, MSCE, August 2002. Project Title: Warranty-Based Contracting Technique in Highway Construction.

**Member on Graduate Student Committees:**

- 4 master students at Marquette University
- 1 Ph.D. student at Marquette University
- 1 Ph.D. student at North Dakota State University
- 3 master students at North Dakota State University
- 26 master students at The University of Kansas
- 3 master students at Texas Tech University

**Supervisor of Undergraduate Research Assistants:**

- 2 at Marquette University
- 10 at University of Kansas
- 3 at Texas Tech University

**Professional Organizations and Community Service:**

**American Society of Civil Engineers (ASCE):**

1. Student Member: 1991-1996; Associate Member: 1997-2001; Member: 2001-2010; Fellow: 2010-Present.
2. Chair, Construction Engineering Education Committee, ASCE, 2018-present.
3. Member of Highway Construction Committee, 2010-2017.
4. Member of Transportation and Development Institute, 2010-2016.
5. Member of Infrastructure Systems Committee, 2010-2012.
6. Member of Design-Build Committee, 2008-2010.
7. Member of 2006, 2013, 2014, 2017, and 2019 Best Paper Award Committee, Journal of Construction Engineering and Management.
8. Member of Construction Research Council, 2005 – Present.
9. Corresponding Member, Engineering Management and Business Practices Committee, 2002.
10. Co-Chair, Construction and Industry Committee, Texas Section of ASCE, 2002.
11. Member of Construction Institute, 2000-Present.

**American Society for Engineering Education (ASEE):**

1. Member, 2005 – Present.
2. Construction Division: Reviewer of Annual Conference Papers, 2012-present.

**American Council for Construction Education (ACCE):**

1. Accreditation visit, The Durham School of Architectural Engineering and Construction, University of Nebraska, October 26-29, 2013.
2. Member, Standards Committee, 2016

**Transportation Research Board (TRB):**

1. Member, Information Systems in Construction Management Subcommittee, AFH10 (1), 2010-2012.
2. Member, Emerging Technology for Design and Construction Committee, 2005 – 2014.
3. Paper Reviewer, TRB Annual Meeting, 2005 –2011.
4. Organizer of Call for Paper, the 89<sup>th</sup> Annual TRB Meeting, Washington D.C., January 2010.

5. Organizer of Call for Paper and Presider of Session 239 (Improving Productivity in Transportation Construction Using Emerging Technologies), the 88<sup>th</sup> Annual TRB Meeting, Washington D.C., January 2009.

**National Science Foundation:**

1. Proposal Review Panelist, Information Technology and Infrastructure Systems Program Unsolicited Proposals, May 29, 2007.
2. Proposal Review Panelist, George E. Brown, Jr. Network for Earthquake Engineering Simulation Research (NEESR), June 28-29, 2004.

**Conference and Meeting:**

1. Session Organizer, Track 1A – Strategy and Best Practices to Expand Construction Engineering Programs, ASCE CI Summit, St. Louis, Missouri, March 1-4, 2023.
2. Session Organizer, Track 10 - Post-Pandemic Construction Engineering Education, ASCE CI Summit 2022, Washington D.C., March 9, 2022.
3. Conference Co-chair, 2020 Virtual International Conference on Construction and Real Estate Management, August 24-25, 2020.
4. Co-chair, Technical Committee, the 13<sup>th</sup> Asia Pacific Transportation Development Conference, Shanghai, China, May 27-30, 2020.
5. Track Co-chair in Construction Education, Technical Committee, CRC 2020, ASCE, Tempe, AZ, March 8-18, 2020.
6. Conference Co-chair, 2019 International Conference on Construction and Real Estate Management, Banff, Canada, May 21-24, 2019.
7. Session Organizer, Track D - Development of U.S. Construction Engineering Education, ASCE CI Summit 2019, Atlanta, GA, March 7, 2019.
8. Conference Co-chair, 2018 International Conference on Construction and Real Estate Management, Charleston, SC, USA, August 9-10, 2018.
9. Honorary Chair, Technical Committee, the 12<sup>th</sup> Asia Pacific Transportation Development Conference, Guangzhou, China, June 14-17, 2018.
10. Conference Co-chair, 2017 International Conference on Construction and Real Estate Management, Guangzhou, China, Nov. 10-12, 2017.
11. Conference Co-chair, 2016 International Conference on Construction and Real Estate Management, Edmonton, Canada, Sept. 29 – Oct. 1<sup>st</sup>, 2016.
12. Conference Co-chair, 2015 International Conference on Construction and Real Estate Management, Lulea, Sweden, August 11-12, 2015.
13. Conference Co-chair, 2014 International Conference on Construction and Real Estate Management, Kunming, China, September 27-28, 2014.
14. Chair of Technical Committee, the 10<sup>th</sup> Asia Pacific Transportation Development Conference, Beijing, China, May 25-27, 2014.
15. Member of Technical Committee, 2014 ASCE Construction Research Congress, Atlanta, Georgia, May 19-21, 2014.
16. Moderator, Session A: People, Planet, Profit. The 2nd Biennial Conference on Sustainable Business, Energy and Development in Asia, Hiroshima, Japan, March 17, 2014.

17. Member of International Steering Committee and Session 3A (Project Management) Chair, 2013 International Conference on Construction and Real Estate Management, Karlsruhe City, Germany, October 10-11, 2013.
18. Member of Technical Committee, the ICTPA 26th Annual Conference, Tampa, Florida, May 24-26, 2013.
19. Conference Executive Chair, 2012 International Conference on Construction and Real Estate Management, Kansas City, Missouri, October 1-2, 2012.
20. Chair of Technical Committee, the 9th Asia Pacific Transportation Development Conference, Chongqing, China, May 25-28, 2012.
21. Chair, Session of Construction Innovation and Technology Management, 2011 International Conference on Construction and Real Estate Management, Guangzhou, China, November 19-20, 2011.
22. Member of Technical Committee, The ICTPA 24th Annual Conference & NACGEA International Symposium on Geo-Trans, Los Angeles, CA, May 27-29, 2011.
23. Organizer, Forum on Higher Education in China, Center for East Asian Studies, The University of Kansas, May 7th, 2011.
24. Chair, Scientific Committee Track 1, International Conference on Sustainable Design and Construction, Kansas City, Missouri, March 23-25, 2011.
25. Co-chair of Technical Committee and Chair of Session 3B (Transportation Planning and Development), the 8th Asia Pacific Transportation Development Conference, Tainan, Taiwan, May 27-30, 2010.
26. Chair of Session 7A (Procurement, Contracting and Legal Affairs), 2010 Construction Research Congress, ASCE, Banff, Canada, May 8-10, 2010.
27. Member of Technical Committee and Chair of Session SUN 1A (Automated/Real-time Systems for Project Control), 2009 Construction Research Congress, ASCE, Seattle, Washington, April 5-7, 2009.
28. Chair of Organizing Committee, NSF Workshop: Rapid Bridge Replacement after Extreme Events, China (Shanghai, Chongqing, and Beijing), September 22nd – October 3rd, 2007.
29. Member of Scientific and Technical Committee and Chair of Session A3 (Behavior-based Safety and Productivity), CIB International Conference on Global Unity for Safety & Health in Construction, Beijing, China, June 26 - 30, 2006.

#### **Technical Journal Reviewer:**

1. ASCE Journal of Construction Engineering and Management, 1999–Present.
2. ASCE Journal of Management in Engineering, 2001–Present.
3. ASCE Journal of Architectural Engineering, 2009–2018.
4. Automation in Construction, Elsevier, 2010-2018.
5. Frontiers of Engineering Management, Higher Education Press, China., 2017-2019.
6. ASCE Journal of Computing in Engineering, 2005–2012.
7. Construction Management and Economics, United Kingdom, 2006–2009.
8. Computer-Aided Civil and Infrastructure Engineering, Blackwell Publishing, 2006-2009.
9. ASCE Journal of Professional Issues in Engineering Education and Practice, 2009-2011.
10. International Journal of Construction Management, Hong Kong, China, 2009-2012.
11. Journal of Tsinghua Science and Technology, Tsinghua University, China, 2009-2012.
12. Civil Engineering and Environmental Systems, Taylor & Francis, 2009-2012.

13. Journal of Advanced Transportation, Wiley, 2011-2016.
14. Traffic Injury Prevention, Taylor & Francis, 2011-2016.
15. Transportation Research Part C, Elsevier, 2011-2016.
16. Habitat International, Elsevier, 2013-2015.

**Book Reviewer:**

1. "Construction Contract Administration," by Schexnayder, McGraw-Hill, Inc., September 2002.

**Research Proposal Reviewer:**

1. "Green Materials Network for Building Construction," Maryland Industrial Partnerships Program, December 3<sup>rd</sup>, 2012.
2. "A Quadcopter with Heterogeneous Sensors for Autonomous Bridge Inspection," Mid-America Transportation Center, University of Nebraska at Lincoln, May 18, 2012.

**Tenure & Promotion External Evaluator:**

1. One faculty member (Promotion to assistant professor and tenure) at School of Construction Management Technology, Purdue University, August 2022.
2. One faculty member (Promotion to full professor) at Civil and Environmental Engineering Department, Syracuse University, Sept. 2021.
3. One faculty member (Promotion to full professor) at the Department of Construction Management, University of North Florida, Sept. 2021.
4. One faculty member (Promotion to full professor) at the Department of Food, Agricultural and Biological Engineering, The Ohio State University, August 2021.
5. One faculty member (Promotion to full professor) at the William States Lee College of Engineering, University of North Carolina at Charlotte, Sept. 2019.
6. One faculty member (Promotion to full professor) at the Durham School of Architectural Engineering and Construction, University of Nebraska-Lincoln, July 2019.
7. One faculty member (Promotion to full professor) at the Department of Civil and Environmental Engineering and Construction, University of Nevada, Las Vegas, July 2018.
8. One faculty member (Promotion to full professor) at the Department of Construction Management, East Carolina University, August 2017.
9. One faculty member at the Department of Civil Engineering, Santa Clara University, August 2017.
10. One faculty member (Promotion to full professor) at the Department of Civil, Environmental and Construction Engineering, Texas Tech University, August 2015.
11. One faculty member at the Department of Engineering Technology and Construction Management, University of North Carolina at Charlotte, September 2014.
12. One faculty member at the Department of Construction Engineering and Engineering Technology, Texas Tech University, July 2014.
13. One faculty member at the Department of Construction Engineering and Engineering Technology, Texas Tech University, August 2013.
14. Two faculty members at the Durham School of Architectural Engineering and Construction, University of Nebraska, October 2012.

15. One faculty member at the Department of Civil and Environmental Engineering, Oklahoma State University, December 2010.
16. One faculty member at the Department of Civil Engineering, The Catholic University of America, June 2010.
17. One faculty member at the Department of Construction Management, East Carolina University, May 2010.
18. One faculty member at the Department of Construction Engineering and Engineering Technology, Texas Tech University, August 2009.
19. One faculty member at the Department of Engineering Technology, University of Houston, May 2009.

**Texas Department of Transportation:**

1. Technical Advisory Panel Member, Texas Department of Transportation Research Management Committee One, September 2000 - August 2003.

**International Service:**

1. Technical Reviewer, the 11<sup>th</sup> International Conference of Chinese Transportation Professionals, August 14-17, 2011, Nanjing, China.
2. Academic Advisory Council Member, Faculty of Civil Engineering, Chongqing University, China, 2006 – 2012.

**Service at Marquette University**

**Department of Civil, Construction and Environmental Engineering**

1. Member, Promotion and Tenure Committee, 2016-2021.
2. Faculty Teaching Evaluator: Oct. 24, 2019, Nov. 3, 2020, April 13, 2021, March 31, 2022.
3. Chair, Faculty Search Committee, 2018-2019 (Successfully hired two assistant professors).
4. Member, Department Chair Search Committee, 2017-2018.
5. Member, Graduate Studies Committee, 2016-2017, 2018-Present.
6. Member, Undergraduate Studies Committee, 2016-Present.
7. Faculty Advisor, Builders Coalition of Marquette University, 2016-Present.

**Opus College of Engineering**

1. Member, Promotion and Tenure Committee, 2019-2022.
2. Member, ABET/University Assessment Committee, 2016-Present.
3. Chair, Infrastructure Research Work Group, 2016-2017.

**University**

1. Member, Program Offerings Work Group, Sept. 2020-May 2021.
2. Member, University Board of Undergraduate Studies, Sept. 2018-May 2021.
3. Seminar Co-organizer, “Development Opportunities under the Belt and Road Initiative,” Guest Speaker, Mr. Hong Lei, Consul General of the Chinese Consulate General in Chicago, funded by the Mellon Grant, January 27, 2018.
4. Faculty advisor, Marquette University Chinese Students and Scholars Association, 2017-Present.

## **Service at North Dakota State University**

### **Department of Construction Management and Engineering**

1. Chair, Faculty Search Committee, 2013-2016 (Successfully hired three assistant professors and one associate professor).
2. Member, Research Committee, 2012-2016.
3. Member, Academic Affairs Committee, 2012-2016.

### **College of Engineering**

1. Member, First Year Engineering Program Committee, 2013-2014.
2. Member of Engineering Building Master Plan Committee, 2013-2016.
3. Member of College ABET Accreditation Committee, 2013-2016.

### **University**

1. Academic Program Director, 2 Plus BS in Construction Management Program between NDSU and Guangzhou University, China, 2014-2016.
2. Member, Engineering Librarian Search Committee, 2015.
3. Member, Program Manager Selection Committee, Theodore Roosevelt Presidential Library Foundation, May 2016.

## **Service at University of Kansas:**

### **Department of Civil, Environmental and Architectural Engineering**

1. Member, Scholarship Committee, 2007-2012.
2. Member, IT Committee, 2007-2012.
3. Meeting prospective students and their parents during semesters and summers, 2005-2012.
4. Faculty Advisor, AGC Student Chapter, August 2003-2012.
5. Advising freshmen and transfer students in the summers, 2005-2011.
6. Chair, Research Committee, 2007-2010.
7. Seminar Organizer: Lessons Learned from Wenchuan Earthquake, January 19<sup>th</sup>, 2010.
8. Teaching Evaluator for an Assistant Professor, Feb. 26, 2009.
9. Seminar Organizer: Transportation and Infrastructure Construction in China, February 16, 2009.
10. Member, Post-Doc Search Committee, 2008.
11. KU Faculty Representative, 2007 AEI National Student Conference, Kansas City, MO, March 30 - 31, 2007.
12. KU Faculty Representative, Region 7 Traffic Safety Research Forum, St. Joseph, MO, March 30, 2006.
13. KU Faculty Representative, the Builders' Association 118<sup>th</sup> Scholarship Award, Kansas City, February 25, 2005.
14. KU Faculty Representative, the 82<sup>nd</sup> Annual Convention of the Kansas Contractors Association, Kansas City, January 27, 2005.
15. Committee Member, Construction Engineering Faculty Search Committee, Fall 2004-Spring 2005.
16. Committee Member, Ad Hoc CEAE Department Committee on Ph.D. Degree, Fall 2004.
17. Faculty Marshal for Architectural Engineering, KU School of Engineering Recognition and Awards Ceremony, May 23, 2004.



18. KU Faculty Representative, the 81<sup>st</sup> Annual Convention of the Kansas Contractors Association, Kansas City, January 29, 2004.

### **School of Engineering**

1. Member, Academic Standards Committee, Fall 2010-2012.
2. Judge, High School Design Competition, School of Engineering, University of Kansas, November 8<sup>th</sup>, 2011.
3. Faculty member for lab tour, Open House for Engineering Graduate Programs, KU School of Engineering, November 12, 2010.
4. Faculty mentor for a Lawrence High School student, Education through Outreach, NSF Project No. 0966614, KU School of Engineering, Fall 2010.
5. Member, Scholarship Committee, Fall 2009-Spring 2010.
6. Member, Computer Committee, Fall 2007-Spring 2009.
7. Member, Engineering Library Committee, Fall 2004-Spring 2006.
8. Judge, Future City Competition, 2006 National Engineers Week, KU School of Engineering, January 28, 2006.
9. Judge, KU School of Engineering's 17<sup>th</sup> Annual High School Design Competition, October 25, 2004.
10. Judge, Future City Competition, 2004 National Engineers Week, KU School of Engineering, January 24, 2004.

### **University**

1. Faculty Advisor, Chinese Students and Scholars Friendship Association, University of Kansas, 2011-2012.
2. Member, University Senate Task Force on Tuition Assistance for Employees, Partners, and Dependents, Fall 2010-2012.
3. Member, Foreign Language Area Studies Fellowships Committee, Center for East Asian Studies, 2010-2011.
4. Member, Academic Procedures and Policies Committee, University Senate Committees, 2008-2011.
5. Ceremony Assistant, Doctoral Hooding Ceremony, the Graduate School, University of Kansas, 2006-2010.
6. Panel and presenter, "Revolution and Protest in 20<sup>th</sup>-century China," Center for East Asian Studies, University of Kansas, May 4, 2009.
7. Member, International Affairs Committee, University Senate Committees, 2005-2008 (Sub-committee C Chair, 2006-2007).

### **Service at Texas Tech University:**

1. University Faculty Senator, 2002-2003.
2. Member, Construction Scholarship Committee, 2002-2003.
3. Member, Department Tenure Policy Review Committee, 2002-2003.
4. Member, Department Post Tenure Review Committee, 2001-2003.
5. Coach, Student ASC/AGC Construction Management Competition, 2000 and 2003.
6. Faculty Advisor, Student Chapter of Associated General Contractors (AGC), 2000-2003.
7. Member, Department Faculty Search Committee, 2000.
8. Member, Department Master Program Development Committee, 2000.

**Community Services:**

1. Member, Wisconsin FIRST Robotics Steering Committee, 2020-2021.
2. Coach, FIRST LEGO League team, 2017-2020.