Behrouz Shafei, PhD, PE	
Associate Professor & Director of Graduate Education Department of Civil, Construction and Environmental Engineering Structural Engineer, Bridge Engineering Center, Institute for Transportation Iowa State University 2711 South Loop Dr, Suite 4700 Ames, IA 50010	515-294-4058 shafei@iastate.edu IOWA STATE UNIVERSITY Institute for Transportation

EDUCATION

- PhD, Civil Engineering, University of California, Irvine, CA, 2011
- MS, Structural Engineering, University of Tehran (Iran), 2006
- B.S., Civil Engineering, University of Tehran (Iran), 2004

PROFESSIONAL EXPERIENCE

- Associate Professor (with Tenure), Department of Civil, Construction and Environmental Engineering, Iowa State University, 2020–present
- Assistant Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, 2014–2020
- Assistant Professor, Department of Civil and Environmental Engineering, University of Massachusetts, Amherst, 2012–2014
- Postdoctoral Scholar, Department of Civil and Environmental Engineering, University of California, Irvine, 2011–2012

SELECTED RESEARCH PROJECTS

- *Update Bridge Construction Requirements* (National Cooperative Highway Research Program): 2024–2027, PI
- *Develop and Field Test Non-Proprietary Ultra-High Performance Concrete for New Bridge Decks* (Iowa Highway Research Board): 2023–2026, PI
- *Automated Assessment of Defects in Bridge Structures* (Federal Highway Administration State Planning & Research & Iowa Department of Transportation): 2023–2025, PI
- *Underwater Concrete Pours and Non-Segregating Concrete* (Wisconsin Department of Transportation): 2022–2023, PI
- *Next Generation of Life-Cycle Cost Analysis Tool for Bridges in Iowa* (Iowa Highway Research Board and Iowa Department of Transportation): Phase I: 2018–2020; Phase II: 2021–2022, Co-PI
- *Assessment of Bridge Decks with Glass Fiber Reinforced Polymer (GFRP) Reinforcement* (Minnesota Department of Transportation): 2018–2022, PI
- *Assessing and Enhancing the Transportation Resilience for the State of Iowa* (FHWA State Planning & Research & Iowa Department of Transportation): 2017–2019, Co-PI
- *Increase Service Life at Bridge Ends through Improved Abutment and Approach Slab Details and Water Management Practices* (Iowa Highway Research Board): 2017–2023, PI

- *Initiative for Big Data-Driven Prediction of Long-Term Bridge Performance and Management Improvement* (Midwest Transportation Center): 2016–2018, Co-PI
- *Condition-Based Maintenance and Management of Aging Transportation Infrastructure* (Midwest Transportation Center): 2015–2017, PI

SELECTED PUBLICATIONS

- Azad, S., and B. Shafei. 2025. Performance evaluation of semi-integral abutment bridge ends based on approach slab details. *Journal of Bridge Engineering*, Vol. 30, No. 3, pp. 1–17.
- Odeh, I., and B. Shafei. 2025. An automated platform to detect, assess, and quantify deterioration in concrete structures. *Journal of Developments in the Built Environment*, Vol. 23, pp. 1–16.
- Farahzadi, L., I. Odeh, M. Kioumarsi, and B. Shafei. 2025. Automated image-based condition assessment of the built environment: A state-of-the-art investigation of damage characteristics and detection requirements. *Journal of Results in Engineering*, Vol. 26, pp. 1–23.
- Oppong, K., A. Vakili, D. Saini, and B. Shafei. 2024. Characterization of damage to steel bridge girders subjected to over-height vehicle collision. *Journal of Constructional Steel Research*, Vol. 221, pp. 1–14.
- Shurbert-Hetzel, C., D. Daneshvar, B. Shafei, and A. Robisson. 2023. Data-enabled comparison of six prediction models for concrete shrinkage and creep. *Journal of Case Studies in Construction Materials*, Vol. 19, pp. 1–23.
- Khatami, D., B. Shafei, and B. Bektas. 2023. Data-assisted prediction of deterioration of reinforced concrete bridges using physics-based models. *Journal of Infrastructure Systems*, Vol. 29, No. 2, pp. 1–13.
- Karim, R., and B. Shafei. 2022. Addition of partial-depth link slabs to bridge structures: Role of support conditions. *Journal of Bridge Engineering*, Vol. 27, No. 7, pp. 1–12.
- Karim, R. and Shafei, B. 2021. Performance of fiber-reinforced concrete link slabs with embedded steel and GFRP rebars. *Journal of Engineering Structures*, Vol. 229, pp. 1–12.
- DeJong, A., Shi, W., Shafei, B., and Hosteng, T. 2021. Laboratory and numerical investigation of integral abutment connections with pile couplers. *Journal of Engineering Structures*, Vol. 248, pp. 1–12.
- DeJong, A., W. Shi, B. Shafei, and T. Hosteng. 2021. Integral abutment connections with grouted reinforcing bar couplers and ultra-high performance concrete. *Journal of Bridge Engineering*, Vol. 26, No. 8, pp. 1–15.

PROFESSIONAL AFFILIATIONS

- Fellow, American Society of Civil Engineers (ASCE)
- Member, ASCE Structural Engineering Institute (SEI) Education and Leadership Committee
- Member, ASCE Task Group 2 on Reliability-Based Structural System Performance Indicators
- Member, Transportation Research Board (TRB) Standing Committee on Concrete Bridges and Structures (AKH12)
- Member, American Concrete Institute (ACI) Concrete Bridge Design Committee (Committee 343)
- Member, ACI Structural Plain Concrete Committee (Committee 380)

- Member, ACI Ultra-High Performance Concrete Committee (Committee 239)
- Member, International Association for Bridge Maintenance and Safety (IABMAS)
- Member, International Association for Life-Cycle Civil Engineering (IALCCE)
- Professional Engineer, P.E. License, State of California

OUTREACH AND COMMUNITY ENGAGEMENT

- Iowa State's Science Bound Program
- Central Iowa's Bridge Building Competition: Ready, Set, Build!