Jeramy Ashlock, PhD	
Professor and James M. Hoover Chair in Geotechnical Engineering, Department of Civil, Construction and Environmental Engineering Iowa State University 412 Town Engineering Building Ames, Iowa 50011	515-294-6176 jashlock@iastate.edu IOWA STATE UNIVERSITY Civil, Construction, and Environmental Engineering

EDUCATION

- PhD, Civil Engineering, University of Colorado Boulder, CO, 2006
- MS, Civil Engineering, University of Colorado Boulder, CO, 2000
- BS, Civil Engineering, University of Colorado Boulder, CO, 1997

PROFESSIONAL EXPERIENCE

- Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, Ames, 2024–present
- Associate Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, Ames, 2016–2024
- Assistant Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, Ames, 2009–2016
- Postdoctoral Research Associate, University of Colorado Boulder, 2007–2008
- GRL & Associates, Engineering Assistant, Boulder, CO, 1994–1997
- Bridge Diagnostics, Inc., Engineering Assistant, Boulder, CO, 1994–1997

SELECTED RESEARCH PROJECTS

- *Application of Geocell Reinforced Layer for Granular-Surfaced Low-Volume Roads* (Iowa Department of Transportation): 2025–2027, PI
- *Stabilization of Gravel Roads by Wicking and Non-Wicking Geosynthetics* (Iowa Department of Transportation): 2024–2026, PI
- *Effectiveness and Guidance of Aggressive Rehabilitation of Gravel Roads* (Iowa Department of Transportation): 2023–2025, PI
- *Central Iowa Expo Pavement Project: Performance Assessment* (Iowa Department of Transportation): 2023–2025, PI
- *Feasibility of Granular Road and Shoulder Recycling Phase II: Gradation Optimization for Improved Performance* (Iowa Department of Transportation and Iowa Highway Research Board): 2021–2023, PI
- *Development of In Situ Cyclic Borehole Shear Soil Test Device* (NCHRP IDEA Program): 2020–2021, PI
- *Low-Cost Rural Surface Alternatives Phase III: Demonstration Project,* (Iowa Department of Transportation): 2017–2020, PI
- *Development of Granular Roads Asset Management System (GRAMS),* (Iowa Department of Transportation): 2017–2019, PI (started as Co-PI)

SELECTED PUBLICATIONS

- Lin, S., J. C. Ashlock, L. Zhu, Z. Qin, B. Li, X. Zhu, and C. Zhai. 2024. Effect of trigger system on experimental dispersion characteristics of active surface wave testing. *Earthquake Engineering and Engineering Vibration*, Vol. 23, pp. 311–318.
- Lin, S., J. C. Ashlock, G. Zhao, Q. Lai, L. Xu, and C. Zhai. 2023. Genetic-simulated annealing optimization for surface wave inversion of shear-wave velocity profiles of geotechnical sites. *Computers and Geotechnics*, Vol. 160.
- Alam-Khan, S., B. Cetin, H. D. Jeong, and J. C. Ashlock. 2023. Gravel Loss Prediction Model Using Beta Regression. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2679, No. 1, pp. 238–249.
- Lin, S., J. Ashlock, and X. Li-Li. 2023. Phase-velocity and intercept-time scanning (PIS) technique for extracting experimental dispersion characteristics of surface waves. *Soil Dynamics and Earthquake Engineering*, Vol. 164.
- Lin, S., T-H. Yi, J. Ashlock, S. Shams, F. Shi, and Y. Wang. 2022. Analytical computation of the dominant dispersion trend of Lamb waves in plate-like structures with an improved dynamic stiffness matrix method. *Structural Control and Health Monitoring*, Vol. 29, No. 11.
- Lin, S., T-H. Yi, J. Ashlock, and N. Gucunski. 2022. Forward modeling of Rayleigh surface waves for analytical characterization of dominant dispersion trends. *Earthquake Engineering and Structure Dynamics*, Vol. 51, No. 1, pp. 240–255.
- Cheng, Z., S. Sritharan, and J. C. Ashlock. 2021. Behavior of a Pile Group Supporting a Precast Pile Cap under Combined Vertical and Lateral Loads. *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 147, No. 9, 12 pp.
- Lin, S., J. Ashlock, and B. Li. 2021. Direct estimation of shear-wave velocity profiles from surface wave data for geotechnical site investigation. *Géotechnique*.
- Ghasemi, P., M. Aslani, J. C. Ashlock, R. C. Williams, and V. R. Schaefer. 2021. Evaluating gantry crane-way pavement performance: An inverse approach. *Transportation Geotechnics*, Vol. 27.
- Satvati, S., A. Nahvi, B. Cetin, J. C. Ashlock, C. T. Jahren, and H. Ceylan. 2021. Performance-based economic analysis to find the sustainable aggregate option for a granular roadway. *Transportation Geotechnics*, Vol. 26.
- Jiang, Z., and J. C. Ashlock. 2020. Computational simulation of three-dimensional dynamic soil-pile group interaction in layered soils using disturbed-zone model. *Soil Dynamics and Earthquake Engineering*, Vol. 130.
- Genc, D., J. C. Ashlock, B. Cetin, and P. Kremer. 2019. Development and Pilot Installation of A Scalable Environmental Sensor Monitoring System for Freeze-Thaw Monitoring under Granular-Surfaced Roadways. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2673, No. 12, pp. 880–890.
- Li, C., J. C. Ashlock, and X. Wang. 2019. Quantifying Repeatability Reproducibility Sources of Error and Capacity of a Measurement: Demonstrated Using Laboratory Soil Plasticity Tests. *Advances in Civil Engineering*, Vol. 2019, 11 pp.

PROFESSIONAL AFFILIATIONS, HONORS, AND SERVICE

- Associate Editor, *Journal of Transportation Engineering, Part B: Pavements*, 2025–present

- Charles W. Schafer Faculty Award for Excellence in Teaching, Research and Service, Department of Civil, Construction and Environmental Engineering, Iowa State University, August 2024
- Member-at-Large, ASTM D18 Executive Subcommittee, ASTM International, 2020, 2021, 2022
- Chair, ASTM Subcommittee D18.09 on Cyclic and Dynamic Properties of Soils, ASTM International, 2017–2018, 2019–2020, 2021–2022
- Reviewer, *ASCE Journal of Engineering Mechanics, ASTM Geotechnical Testing Journal, ASCE Journal of Geotechnical and Geoenvironmental Engineering, Construction and Building Materials, Soil Dynamics and Earthquake Engineering*, and others
- Outstanding Reviewer Award for 2020, *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, American Society of Civil Engineers (Awarded May 5, 2021)
- Excellence in Face-To-Face Instruction Award (for Fall 2020), Iowa State COVID-19 Exceptional Effort Awards Program (Awarded January 5, 2021)