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Professional Preparation

Florida A&M University	Tallahassee, FL	Civil Engineering	B.S.	5/1987
Howard University	Washington, DC	Civil Engineering	M.Eng.	5/1992
Northwestern University	Evanston, IL	Civil Engineering	Ph.D.	12/2002

Academic and Professional Appointments

Professor	University of Kentucky	7/2021 – present
Associate Professor	University of Kentucky	7/2012 – 6/2021
Assistant Professor	University of Kentucky	8/2006 – 7/2012
Assistant Professor	Ohio University	11/2001 – 8/2006
GE Faculty Intern	Northwestern University	9/2000 – 9/2001
Teaching and Research Assistant	Northwestern University	9/1998 – 9/2000
Geotechnical Engineer	CH2M HILL, Inc.	1/1992 – 9/1998
Research Engineer	Federal Highway Administration	1/1990 – 1/1992
Research Engineer	Los Alamos National Laboratory	1/1989 – 1/1990

Registrations

Registered Professional Engineer: Wisconsin, Illinois, Ohio, Indiana, Michigan, Kentucky

Closely Related Products

1. Crawford, M.M., Dortch, J.M., Koch, H.J., Killen, A.A., Zhu, J., Zhu, Y., Bryson, L.S., and Haneberg, W.C. (2021). "Using landslide-inventory mapping for a combined bagged-trees and logistic-regression approach to landslide susceptibility in eastern Kentucky," *Quarterly Journal of Engineering Geology and Hydrogeology*, <http://dx.doi.org/10.1144/qjegh2020-177>.
2. Mahmoodabadi, M.¹, and Bryson, L.S. (2021). "Prediction of Coupled Hydro-Mechanical Behavior of Unsaturated Soils Based on Seasonal Variations in Hydrologic Conditions," *Canadian Geotechnical Journal*, DOI: 10.1139/cgj-2020-0388.
3. Mahmoodabadi, M.¹, and Bryson, L.S. (2021). "Constitutive Model for Describing the Fully Coupled Hydro-Mechanical Behavior of Unsaturated Soils," *International Journal of Geomechanics*, ASCE, 21(4), 04021027.
4. Mahmoodabadi, M.¹, and Bryson, L.S. (2021). "Direct Application of the Soil-Water Characteristic Curve to Estimate the Shear Modulus of Unsaturated Soils," *International Journal of Geomechanics*, ASCE, 21(1), 04020243.
5. Muttashar, W.¹, and Bryson, L.S. (2020). "Constitutive Model for Predicting Stress Strain Behavior of Fine-Grained Sediments using Shear Wave Velocity," *Marine Georesources and Geotechnology*, 38(8), 896-910.

Other Significant Products

1. Bryson, L.S., Smith, P.R.¹, and Mahboub, K.C. (2021). "A Rational Bubble Screen Design Approach for Mitigation of Underwater Explosion Near Waterborne Infrastructure," *Canadian Journal of Civil Engineering*, 48(3), 298-311.

2. Romana Giraldo¹, J. and Bryson, L.S. (2021), "Simplified Model for Cracking of Infill Walls Due to Excavation-Induced Distortions," International Foundation Congress and Equipment Expo (IFCEE) 2021, Dallas, Texas, USA, 10-14 May 2021.
3. Romana Giraldo, J.¹, Bryson, L.S. and Gutierrez Soto, M. (2020). "Performance of Two Tieback Walls under a Unique Construction Sequence Installed in a Shale Stratum," *Journal of Geotechnical and Geological Engineering*, Springer, 38(2), 1799-1816.
4. Bryson, L.S. and Romana Giraldo, J.¹ (2020). "Analysis of case study presenting ground anchor load-transfer response in shale stratum," *Canadian Geotechnical Journal*, 57(1), 85-99.
5. Rizzo, R. J.¹ and Bryson, L.S. (2020), "Remote Sensing Application for Sinkhole Monitoring Along Roadways," IEEE SoutheastCon 2020, Raleigh, NC, 12-15 March 2020.

Teaching and Synergistic Activities

Undergraduate Courses Taught:

CE 579 Geotechnical Engineering
EGR 199 Introduction to Research

Graduate Courses Taught:

CE 671 Advanced Soil Mechanics
CE 673 Stability of Earth Slopes

- Reviewer for the ASCE Journal of Geotechnical and Geoenvironmental Engineering

Professional Affiliations

- American Society of Civil Engineers, Geo-Institute
- International Society of Soil Mechanics and Foundation Engineering
- American Geophysical Union, Life Member
- The Association of State Dam Safety Officials

Collaborators

- Dr. Xiong (Bill) Yu, Professor, Case Western Reserve University
- Dr. Andrew Parsekian, Associate Professor, University of Wyoming
- Dr. Wenjie Xia, Assistant Professor, North Dakota State University

Most Recent Thesis Advisees

- Effects of Hydrologic Variations on Hydraulic and Deformational Characteristics of Unsaturated Soils, Majid Mahmoodabadi (Ph.D., December 2020)
- Analysis of the Pile Load Test at the US 68/KY 80 Bridge over Kentucky Lake, Edward Scott Lawson (M.S. Thesis, May 2019)
- The Effect of Depositional Processes on the Strength and Compressibility of Sediments using Elastic Shear Wave Velocity, Wisam Razzaq Muttashar (Department of Earth and Environmental Sciences, Ph.D., May 2019)
- Hydrologic Monitoring and 2-D Electrical Resistivity Imaging for Joint Geophysical and Geotechnical Characterization of Shallow Colluvial Landslides, Matthew Crawford, (Department of Earth and Environmental Sciences, Ph.D., December 2018)
- Performance of Two Tieback Walls and Rock Anchors in a Shale Stratum, Jorge Octavio Romana Giraldo (M.S. Thesis, August 2018)
- Performance of the Grout Curtain at Kentucky River Lock and Dam No. 8, Robert Courtney Hatton (M.S. Thesis, May 2018)
- Self-Sensing Cementitious Materials, Alexander Nicholas Houk (M.S. Thesis, December 2017)
- Using Unmanned Aerial Systems (UAS) and Photogrammetry to Remotely Assess Landslide Events in Near Real-Time, Jordan Trent Keeney (M.S. Thesis, August 2016)