L. Sebastian Bryson, Ph.D., P.E.

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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

Associate Professor	University of Kentucky	7/2012 – present
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.[1], Bryson, L.S., Woolery, E.W., and Wang, Z. (2018). "Using 2-D Electrical Resistivity Imaging for Joint Geophysical and Geotechnical Characterization of Shallow Landslides," *Journal of Applied Geophysics*, 157, October, 37-46.
2. Crawford, M.M.[1] and Bryson, L.S. (2018). "Assessment of Active Landslides Using Field Electrical Measurements," *Engineering Geology*, 233, 146-159.
3. Bryson, L.S., Mahmoodabadi, M.[1], and Adu-Gyamfi, K. (2017). "Prediction of Consolidation and Shear Behavior of Fly Ash-Soil Mixtures using Mixture Theory," *Journal of Materials in Civil Engineering*, ASCE, 29(11), 04017222.
4. Schal, S.[1], Bryson, L.S., and Ormsbee, L. (2016). "A Simplified Procedure for Sensor Placement Guidance for Small Utilities," *International Journal of Critical Infrastructures*, 12(3), 195-212.
5. Walton-Macaulay, C.[1], Bryson, L.S., Hippley, B.T., and Hardin, B.O. (2015). "Uniqueness of Constitutive Shear Modulus Surface for Unsaturated Soils," *International Journal of Geomechcanics*, ASCE, 15(6), 06015002.

Other Significant Products

1. Keeney, J.[1], and Bryson, L.S. (2018). "Using Unmanned Aerial Systems and Photogrammetry to Remotely Assess Landslide Events in Near Real-Time," *Proceedings of the 49th Annual Ohio River Valley Soils Seminar*, ORVSS XLIX, Lexington, KY, 29 November 2018.
2. Kalinski, M.E., Bryson, L.S., Krumenacher, A.D., Phillips, B., Ethington, Z., and Webster, B.T. (2014) "Existing Technologies for Deterring and Defeating Waterside Attack on Dams," *International Journal of Critical Infrastructures*, 10(3/4), 247-266.
3. Bryson, L.S. and Zapata-Medina, D.G.[1] (2012). "Method for Estimating System Stiffness of Excavation Support Systems," *Journal of Geotech and Geoenvir Engineering*, ASCE, 138(9), 1104-1115

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
- Canadian Geotechnical Society
- The Association of State Dam Safety Officials

Collaborators

- Dr. Ed Woolery, Professor, University of Kentucky
- Dr. James Fox, Professor, University of Kentucky
- Dr. Michael Kalinski, Professor, University of Kentucky
- Dr. Lindell Ormsbee, Professor, University of Kentucky
- Dr. Kamyar Mahboub, Professor, University of Kentucky

Graduate Advisor

- Professor Richard J. Finno, Northwestern University

Most Recent Thesis Advisees

- Analysis of the Pile Load Test at the US 68/KY 80 Bridge over Kentucky Lake, Edward Scott Lawson (M.S. Thesis, May 2019)
- Hydrologic Monitoring and 2-D Electrical Resistivity Imaging for Joint Geophysical and Geotechnical Characterization of Shallow Colluvial Landslides, Matthew Crawford, (Co-Advising with Ed Woolery, 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 Cementious 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)
- Underwater Explosion Energy Dissipation Near Waterborne Infrastructure, Paul Raymond Smith (M.S. Thesis, December 2015)
- Prediction of Strength and Shear Modulus of Compacted Clays within an Unsaturated Critical State Framework, Corrie Walton Macaulay (Ph.D., May 2015)
- Deformation-Based Design of Excavation Support System Design Method, Sekyi Kobina Intsiful (M.S. Thesis, May 2015)
- Mechanical Behavior of Grouted Sand, Ryan Ortiz (M.S. Thesis, May 2015)
- Mechanical Behavior of Weathered Compacted Shale, Xu Zhang (M.S. Thesis, December 2014)
- Calibration of Non-Nuclear Devices for Construction Quality Control of Compacted Soils, Joshua Eli Robert Wells (M.S. Thesis, August 2014)