Michael A. Perez, Ph.D.

Assistant Professor

Auburn University - Department of Civil Engineering

207 Harbert Center, Auburn, AL 36849

(786) 493-9805 • mike.perez@auburn.edu • www.map08g.wix.com/cswl

EDUCATION -

Ph.D., Civil Engineering, Auburn University - Construction Engineering & Management, Water Resources	Dec. 2016
M.S., Civil Engineering, Auburn University - Construction Engineering & Management	Dec. 2014
B.S., Civil Engineering, Florida State University - Civil Engineering, Environmental Engineering	May 2012

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT -

- ASCE Excellence in Civil Engineering Education (ExCEEd) Fellow (2017)
- Federal Aviation Administration Remote Pilot (Unmanned Aerial Vehicle) Certification (2018)
- Certified Professional in Erosion & Sediment Control (CPESC) No. 8198 (June 2015)
- Engineer Intern, Florida Board of Professional Engineers No. 1100016512 (July 2012)
- Leadership in Energy and Environmental Design (LEED) Green Assoc. No. 10840540 (May 2013)

EMPLOYMENT HISTORY -

2019 - Present	Assistant Professor, Dept. of Civil Engineering, Auburn University
2017 - 2019	Assistant Professor, Dept. of Civil, Construction and Environmental Engineering, Iowa State University
2017 - 2017	Civil Engineer – Stormwater Transportation, AECOM, Atlanta, GA
2012 - 2016	Graduate Research Assistant, Dept. of Civil Engineering, Auburn University
2010 - 2012	Undergraduate Research Fellow, Dept. of Civil & Environmental Engineering, Florida State University
2010 - 2012	Coastal Engineer Technician, Florida Department of Environmental Protection, Tallahassee, FL

AWARDS & RECOGNITIONS —

2016 Proclamation of Recognition - City of West Miami, Florida

2016 Environmental Connection Most Distinguished Technical Paper – International Erosion Control Association

2015 Distinguished Eng. Graduate Student Seminar Series Award – Auburn University Council of Eng. Graduate Students

2015 Outstanding Master's Student Award – Auburn University Graduate School

2015 Outstanding e-Portfolio Award, Honorable Mention – Auburn University Office of University Writing

2014 Julia and Albert Smith Graduate Fellowship - Samuel Ginn College of Engineering, Auburn University

2014 Brasfield and Gorrie Fellowship – Samuel Ginn College of Engineering, Auburn University

2012 Brasfield and Gorrie Fellowship - Samuel Ginn College of Engineering, Auburn University

2012 Student Engineer of the Year - American Society of Civil Engineers, Tallahassee, FL Branch

2012 Academic Leadership Award - Florida State University

2011 Student Star - Florida State University

HONOR SOCIETIES -

- Tau Beta Pi Engineering Honor Society
- Chi Epsilon Civil Engineering Honor Society
- Civil Engineering Honor Society, Florida State University
- Seminole Torchbearer Leadership Society, Florida State University Division of Student Affairs
- Golden Key International Honor Society
- Sigma Alpha Lambda Honor Society
- Phi Eta Sigma Honor Society

TEACHING RESPONSIBILITIES -

CE 594W - Construction Stormwater Management and Green Infrastructure (3) Iowa State University

SP19

This course covers the process of erosion, sediment transport, and sedimentation along with strategies adopted to prevent and manage erosion on construction sites. In addition, design strategies using green infrastructure and low impact development to manage post-construction stormwater impacts including runoff quantity and quality are covered.

CE 5940 - Highway and Heavy Construction (3)

Iowa State University

SP18

This course is designed to familiarize students with the special skills required in the heavy-civil area of the construction industry and give them analytical tools to compete for and manage projects in that arena. Topics include unit price estimating, linear scheduling, and asset management.

ConE 322 - Construction Equipment and Heavy Construction Methods (3) lowa State University FA18, FA17This course encompasses the technical, economic, and safety issues associated with construction engineering. Specifically, this includes: selection and acquisition of construction equipment, application of engineering fundamentals and economics to performance characteristics and production of equipment, and heavy construction methods and economic applications.

CE 121 - Construction Engineering Cornerstone Learning Community (1)Iowa State University

FA18

This course is designed to familiarize students with the special skills required in the heavy-civil area of the construction industry and give them analytical tools to compete for and manage projects in that arena. Topics include unit price estimating, linear scheduling, and asset management.

CE 595B – Research Methods Seminar in Construction Engineering and Management (1) lowa State University FA18

This course provides an overview on research methods to solve construction engineering and management problems. Identification of research methods and priorities, selection and development of research design, and critique of research in construction engineering and management. In addition, provides professional development and readiness for graduate students seeking to enter the academic and industry professions.

CIVL 3410 - Construction Engineering (3) Beijing University of Civil Engineering and Architecture SU16 Instructed junior-level BUCEA civil engineering students enrolled in the Auburn University College of Engineering transient exchange program. This course provided an overview of the construction engineering and management environment placing into context the sequential stages and participants of the construction project, and explored the various documents and procedures affiliated with the construction process.

In	Individual lectures taught in the following courses, Auburn University, Alabama 2013-2016						
	CIVL 5450/6450	Erosion & Sediment Control Technologies in Construction	(2 lectures)				
	CIVL 5340/6430	Construction Safety and Health Management	(8 lectures)				
	CIVL 5110/6110/6116	Open Channel Hydraulics	(3 lectures)				
	CIVL 4420	Project Management	(3 lectures)				
	CIVL 3410	Construction Engineering	(5 lectures)				
	ENGR 2050	Statics	(2 lectures)				
	ENGR 1110	Introduction to Engineering	(4 lectures)				
	BSEN 6560	Site Design for Biosystems Engineering	(1 lectures)				
	XXXX	Fundamentals of Engineering Review Sessions	(6 lectures)				

SCHOLARLY CONTRIBUTIONS —

Refereed journals:

- 15. **Perez, M.A.**, Zech, W.C., Donald, W.N., Turochy, R.E., Karabulut-Ilgu, and Fagan, B.G. <u>Transferring Innovative Erosion and Sediment Control Research Results into Industry Practice</u>, ASABE Applied Engineering in Agriculture, [under review].
- 14. Whitman, J.W., **Perez, M.A.**, Zech, W.C., Donald, W.N., and McLaughlin, R.A. <u>Silt Fence State-of-the-Practice: A Review of Design, Installation, Inspection, and Maintenance Standards</u>, ASCE Practice Periodical on Structural Design and Construction, [under review].
- 13. **Perez, M.A.**, Zech, W.C., Vasconcelos, J.G., and Fang X. <u>Large-Scale Performance Testing of Temporary Sediment Basin Treatments and High-Rate Lamella Settlers</u>, Water, [10.3390/w11020316].
- 12. Basham, D.L., Zech, W.C., Donald, W.N., and **Perez, M.A.** (2019) <u>Design and Construction of a Full-Scale Testing Apparatus</u> for Evaluating the Performance of Catch Basin Inserts, ASCE J. of Sustainable Water in the Built Environment, [10.1061/JSWBAY.0000868.].

- 11. Bugg, R.A., Donald, W.N., Zech, W.C., and **Perez, M.A.** (2017). <u>Performance Evaluations of Three Silt Fence Practices Using a Full-Scale Testing Apparatus</u>, Water, [DOI: 10.3390/w9070502].
- Bugg, R.A., Donald, W.N., Zech, W.C., and Perez, M.A (2017). <u>Improvements in Standardized Testing for Evaluating Sediment Barrier Performance: Design of a Full-Scale Testing Apparatus</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR.1943-4774.0001194].
- 9. **Perez, M.A.**, Zech, W.C., Donald, W.N., and Fang, X. (2016). <u>SEDspread: A Sediment Basin Design Tool for Construction Sites</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR.1943-4774.0001099].
- 8. **Perez, M.A.**, Zech, W.C., Fang, X, and Vasconcelos, J. (2016). <u>Methodology and Development of a Large-Scale Sediment Basin for Performance Testing</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR.1943-4774.0001052].
- 7. Donald, W.N., Zech, W.C., Fang, X., and **Perez M.A.** (2016). <u>A Hydraulic Method to Evaluate the Performance of Ditch Check Practices and Products</u>, ASCE J. of Hydrologic Eng., [DOI: 10.1061/(ASCE)HE.1943-5584.0001311].
- 6. **Perez, M.A.**, Zech, W.C., Donald, W.N. and Fang, X. (2016). <u>Installation Enhancements to Common Inlet Protection Practices (IPPs) using Large-Scale Testing Techniques</u>, Transportation Research Record: Journal of the Transportation Research Board, No. 2571, pp. 151-161. [DOI: 10.3141/2521-16].
- Perez, M.A., Zech, W.C., Donald, W.N., and Fang, X. (2016). <u>Design Methodology for the Selection of Temporary Erosion and Sediment Control Practices based on Regional Hydrological Conditions</u>, ASCE J. of Hydrologic Eng. [DOI: 10.1061/(ASCE)HE.1943-5584.0001328].
- Donald, W.N., Zech, W.C., Perez, M.A., and Fang, X., (2015). <u>Evaluation and Modification of Wire Backed, Nonwoven Filter Fabric Silt Fence for use as a Ditch Check</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR. 1943-4774.0000959].
- 3. **Perez, M.A.**, Zech, W.C., and Donald, W.N. (2015). <u>Using Unmanned Aerial Vehicles (UAVs) to Conduct Site Inspections of Erosion and Sediment Control Practices and Track Project Progression</u>, Transportation Research Record: Journal of the Transportation Research Board, No. 2528, pp. 38-48. [DOI: 10.3141/2528-05].
- 2. **Perez, M.A.**, Butler, C.G., and Fang, X. (2015). *Compute Critical and Normal Depths of Arch and Elliptical Pipes,* ASCE J. of Irrigation and Drainage Eng. [DOI: 10.1061/(ASCE)IR.1943-4774.0000884].
- Perez, M.A., Zech, W.C., Donald, W.N. and Fang, X. (2014). <u>Methodology Development for Evaluating Inlet Protection Practices (IPPs) Using Large-Scale Testing Techniques</u>, ASCE J. of Hydrologic Eng. [DOI: 10.1061/(ASCE)HE.1943-5584.0001019].

Conference proceedings:

- 15. **Perez, M.A.**, Zech, W.C., Donald, W.N. and Fang, X. <u>Sizing Sediment Basins for Site-Specific Conditions</u>, Proceedings of the 18th Annual International Erosion Control Association (IECA) Conference, Erosion & Sediment Control Session, Long Beach, CA. Feb. 13, 2018.
- 14. Basham, D.L., Zech, W.C., Donald, W.N., and **Perez, M.A.** <u>Design and Construction of a Catch Basin Insert Testing</u>
 <u>Apparatus for Performance Evaluation</u>, Proceedings of the 18th Annual International Erosion Control Association (IECA)
 Conference, Erosion & Sediment Control Session, Long Beach, CA. Feb. 13, 2018.
- 13. Horne, M.A., Zech, W.C., Fang, X., Donald, W.N., and **Perez, M.A.** <u>Design and Construction of a Pressurized Rainfall Simulator for Performance-Based Testing of Erosion-Control Practices</u>, Transportation Research Board 97th Annual Meeting Compendium of Papers (Online), TRB Paper No. 18-01268 Extended Abstract. Jan. 7-11, 2018.
- 12. **Perez, M.A.**, Zech, W.C., Vasconcelos, J., and Fang, X. <u>Large-Scale Performance Testing of Temporary Sediment Basin Treatments and High-Rate Lamella Settlers</u>, Transportation Research Board 97th Annual Meeting Compendium of Papers (Online), TRB Paper No. 18-00486 Extended Abstract. Jan. 7-11, 2018.
- 11. **Perez, M.A.**, Zech, W.C., and Fang, X. <u>SEDspread: A Sediment Basin Design Tool for Construction Sites,</u> Proceedings of the 17th Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 24, 2017.
- 10. **Perez, M.A.**, Zech, W.C., Fang, X., and Vasconcelos, J. <u>Large-Scale Performance Evaluations of High Rate Lamella Settlers in Sediment Basin Applications</u>, Proceedings of the 17th Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 24, 2017.
- Bugg, R.A., Zech, W.C., Donald, W.N., and Perez, M.A. <u>Performance Evaluation of Sediment Barriers for Construction Applications using Full-Scale Testing Methods</u>, Proceedings of the 17th Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 24, 2017.

- 8. Horne, M.A., Zech, W.C., Donald, W.N., and **Perez, M.A.** Construction of a Rainfall Simulator for Field-Scale Testing of Erosion Control Products, Proceedings of the 17th Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 22, 2017.
- Perez, M.A., Zech, W.C., Fang, X., and Vasconcelos, J. <u>Large-Scale Performance Enhancement Study of Sediment Basin Technology</u>, Proceedings of the 16th Annual International Erosion Control Association (IECA) Environmental Connection 16 Conference, Erosion & Sediment Control Session, San Antonio, TX. Feb. 16-19, 2016.
- Perez, M.A., Zech, W.C., Donald, W.N., and Fang, X. <u>Enhanced Inlet Protection Practices Developed through Large-Scale Testing</u>, Proceedings of the 2nd Annual U.S. EPA Region 5 International Erosion Control Association (IECA) Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session, Atlanta, GA. June 15-16, 2015.
- 5. **Perez, M.A.**, Zech, W.C., and Donald, W.N., <u>Drones: The Future of Erosion and Sediment Control Site Inspections</u>, Proceedings of the 2nd Annual U.S. EPA Region 5 International Erosion Control Association (IECA) Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session, Atlanta, GA. June 15-16, 2015.
- Perez, M.A., Zech, W.C., Donald, W.N., and Fang, X. <u>Enhancement of Inlet Protection Practice (IPP) Installations using Large-Scale Testing Techniques</u>, Proceedings of the 15th Annual International Erosion Control Association (IECA) Environmental Connection 15 Conference, Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 15-18, 2015.
- 3. **Perez, M.A.**, Zech, W.C., and Donald, W.N. "Drones": Revolutionizing Erosion and Sediment Control Site Inspections, Proceedings of the 15th Annual International Erosion Control Association (IECA) Environmental Connection 15 Conference, Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 15-18, 2015.
- Donald, W.N., Zech, W.C., Fang, X., and Perez, M.A. <u>A Hydraulic Performance Evaluation Method for Ditch Checks</u>, Proceedings of the 15th Annual International Erosion Control Association (IECA) Environmental Connection 15 Conference, Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 15-18, 2015.
- Perez, M.A., Zech, W.C., Donald, W.N., and Fang, X. <u>Evaluation of Inlet Protection Practices (IPPs) using Large-Scale Testing Techniques</u>, Proceedings of the 14th Annual International Erosion Control Association (IECA) Environmental Connection 14 Conference, Erosion & Sediment Control (TS-6) Session, Nashville, TN. Feb. 25-28, 2014.

Technical | Final reports submitted to funding agencies:

- 3. Vasconcelos, J.G., **Perez, M.A.**, Wang, J., Zech, W.C., and Fang, X. (2017). <u>Final Report: Evaluation of High-Rate Settling Technology for Sediment Control in Roadway Construction Sites</u>, to Alabama Department of Transportation, Highway Research Center, Auburn, AL 36849.
- Perez, M.A., Zech, W.C., and Fang, X. (2016). <u>Final Report: Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques</u> [ALDOT Project 930-853R] to Alabama Department of Transportation, Highway Research Center, Auburn, AL 36849.
- 1. **Perez, M.A.**, Fang, X., Zech, W.C., and Vasconcelos, J.G. (2015). <u>Research Report: Design and Construction of a Large-</u>Scale Sediment Basin and Preliminary Testing Results to Highway Research Center, Auburn, AL 36849.

Theses and Dissertations:

- 3. **Perez, M.A.** <u>Improvements in the Design and Application of Erosion and Sediment Control Technologies for the Construction Industry. Doctorate of Philosophy Dissertation, Auburn University, Auburn, AL.</u>
- 2. **Perez, M.A.** Evaluation of Inlet Protection Practices (IPPs) Using Large-Scale Testing Techniques. Master of Science Thesis, Auburn University, Auburn, AL.
- 1. **Perez, M.A.** <u>The Effects of Silver Nanoparticles on Wastewater Treatment and Escherichia Coli Growth</u>. Bachelor of Science Honors Thesis, Florida State University, Tallahassee, FL.

Invited lectures, webinars, & training presentations:

Note: *indicates presenter

National & International level:

- 16. **Perez, M.A.***, Zech, W.C., Donald, W.N., and Fang, X., <u>Designing Effective Sediment Basins using Spreadsheets</u>, International Erosion Control Association (IECA) Webinar Series. Online Webinar, Dec. 12, 2018.
- 15. **Perez, M.A.***, Zech, W.C., Fang, X., and Vasconcelos, J.G., <u>Sediment Basin Design and Research in the United States</u>, International Erosion Control Association (IECA), New Zealand Institute of Highway Technology Conference. Christchurch, New Zealand, Aug. 29, 2018.

- 14. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.***, <u>Design Fundamentals of Erosion & Sediment Control Measures for Construction Activities</u>, International Erosion Control Association. Online Workshop (6-hr), Jun. 1, 2018.
- 13. **Perez, M.A.*** and Fagan, B.G.*, <u>Mythbusters: the Stormwater Episode</u>, 18th Annual International Erosion Control Association (IECA) Conference. Long Beach, CA, Feb. 12, 2018.
- 12. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.***, <u>Research Showcase at the Auburn University Erosion and Sediment Control Testing Facility</u>, 17th Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference. Opelika, AL, Feb. 21, 2017.
- 11. **Perez, M.A.***, Zech, W.C., Fang, X., and Vasconcelos, J.G., <u>Large-Scale Performance Enhancement Study of Sediment Basin Technology</u>, International Erosion Control Association (IECA) Roadshow. Online Webinar, Oct. 18, 2016.
- 10. Zech, W.C.*, **Perez, M.A.**, Donald, W.N., and Fang, X., *Evaluating Storm Water Control for SWPPPs*, 2016 AASHTO Subcommittee on Construction Annual Conference. Big Sky, MT, Aug. 18, 2016.
- 9. Zech, W.C., Donald, W.N., Fang, X*, and **Perez, M.A.**, *Evaluation and Enhancements of Stormwater Runoff Control Measures using Large-Scale Testing Techniques*, International Low Impact Development Conference. Beijing, China, Jun. 29, 2016.
- 8. **Perez, M.A.***, Zech, W.C., and Donald, W.N., <u>21st Century Technology: Aerial Inspections Using Unmanned Aerial Vehicles</u>, Maryland Recycling Network and Solid Waste Association of North America Mid-Atlantic Chapter Annual Conference. Ellicott City, MD, Jun. 22, 2016.
- 7. **Perez, M.A.***, Zech, W.C., and Donald, W.N., <u>Designing Effective Sediment Basins</u>, International Erosion Control Association (IECA) Webinar Series. Online Webinar, Jan. 20, 2016.
- 6. **Perez, M.A.***, Zech, W.C., and Donald, W.N., <u>Keynote Speaker: The Use of Unmanned Aerial Systems (a.k.a. Drones) in Construction Site Erosion and Sediment Control Inspections</u>, 17th Annual U.S. Environmental Protection Agency Region 6 Stormwater Conference. Hot Springs, AR, Oct. 22, 2015.
- Zech, W.C., Donald, W.N., and Perez, M.A.*, <u>Evaluation and Enhancements of Runoff Control Measures using Large-Scale Techniques</u>, 17th Annual U.S. Environmental Protection Agency Region 6 Stormwater Conference. Hot Springs, AR, Oct. 21, 2015.
- 4. **Perez, M.A.***, Zech, W.C., and Donald, W.N., <u>'It's a Bird, it's a Plane, it's a Drone!': The Future of Erosion and Sediment Control Site Inspections</u>, International Erosion Control Association (IECA) Webinar Series. Online Webinar, Oct. 21, 2015.
- 3. Zech, W.C.*, Donald, W.N., and **Perez, M.A.**, <u>Evaluation and Enhancements of Runoff Control Measures using Large-Scale Testing Techniques</u>, International Erosion Control Association (IECA) Roadshow. Bella Vista, AR, Aug. 27, 2015.
- 2. **Perez, M.A.***, Zech, W.C., and Donald, W.N., <u>'Drones': Revolutionizing Site Inspections</u>, Forester University Master Class Series. Online Webinar, May. 28, 2015.
- 1. **Perez, M.A.**, Zech, W.C.*, Donald, W.N., and Fang, X., <u>Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques</u>, International Erosion Control Association (IECA) Webinar Series. Online Webinar, May. 20, 2015.

State & Regional level

- 26. **Perez, M.A.***, Iowa County Engineers Association Annual Conference, <u>Innovations in Erosion and Sediment Control Practices</u>, Des Moines, IA, Dec. 13, 2018.
- 25. **Perez, M.A.***, Local Governmental Collaborative Stormwater Education Events, <u>What can we do to Better Manage Stormwater?</u>, Clive, IA, Jun. 13, 2018.
- 24. **Perez, M.A.***, W. Zech, W. Donald, J.G. Vasconcelos, and X. Fang, International Erosion Control Association Great Connections Conference, <u>A New Passive Treatment Method for Temporary Sediment Basins</u>, Dubuque, IA, Apr. 24, 2018.
- 23. **Perez, M.A.***, W. Zech, W. Donald, X. Fang, J.G. Vasconcelos, and J.B. Whitman, Iowa Water Conference, *Innovative Stormwater Treatment Practices Developed Through Large-Scale Testing Efforts*, Ames, IA, Mar. 22, 2018.
- 22. **Perez, M.A.***, W. Zech, W. Donald, X. Fang, Iowa Stormwater Summit, <u>Advances in Erosion and Sediment Control Practices</u> and Drones for Stormwater Management Inspections, Ankeny, IA, Dec. 12, 2017.
- 21. **Perez, M.A.***, W. Zech, W. Donald, X. Fang, Mid-Continent Transportation Research Symposium, *Evaluation and Enhancement of Construction Stormwater Controls using Large-Scale Testing Techniques*, Ames, IA, Aug. 17, 2017.
- 20. **Perez, M.A.*** Georgia Department of Transportation, <u>Worksite Erosion Control Supervisor Certificate Course</u>, Thomaston, Jessup, GA. Jul. 11-12, 2017.
- 19. O'Brien, A.Z.*, **Perez, M.A.***, Jones, R.* Georgia Department of Transportation, <u>Post-Construction Stormwater Design</u> Course, Atlanta, GA. Jun. 28-29, 2017.

- 18. **Perez, M.A.*** Georgia Department of Transportation, *Worksite Erosion Control Supervisor Certificate Course*, Cartersville, Gainesville, GA. Jun. 13-14, 2017.
- 17. **Perez, M.A.*** and Sherrod, T.M.* Georgia Department of Transportation, <u>Construction Engineering and Inspection for Post-Construction Best Management Practices</u>, Tennille, Chamblee, GA May. 2, 4, 2017.
- 16. **Perez, M.A.*** and Sherrod, T.M.* Georgia Department of Transportation, <u>Inspection and Maintenance for Post-Construction Best Management Practices</u>, Gainesville, Cartersville, Forest Park, GA, Apr. 26-27, May 3, 2017.
- 15. Zech, W.C., Donald, W.N.*, **Perez, M.A.**, and Bugg, R.A. ASCE Alabama Section Winter Meeting, <u>Large Scale Runoff & Erosion Control Practices</u>, Birmingham, AL Mar. 2, 2017.
- 14. Fagan, B.G.*, Norton, E.L.*, and **Perez, M.A.***, Training Seminar, <u>Certified Professional in Erosion and Sediment Control Review Course</u>, Montgomery, AL, Nov. 29, 2016.
- 13. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.*** Alabama Technology Transfer Center Seminar, <u>Innovative Erosion & Sediment Control Field Day</u>, Opelika, AL, Nov. 18, 2016.
- 12. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.*** Alabama Technology Transfer Center Seminar, <u>Erosion & Sediment Control Hands-On Field Installer Workshop</u>, Opelika, AL, Nov. 16-17, 2016.
- 11. **Perez, M.A.***, and Fagan, B.G.* Training Seminar, <u>Alabama Erosion and Sediment Control Qualified Credential Professional Seminar</u>, Madison, Irondale, Tuscaloosa, Montgomery, Spanish Fort, AL, Oct. 31 Nov. 3, 8, 2016.
- 10. **Perez, M.A.***, Bugg, R.A.*, Zech, W.C., and Donald, W.N. Clear Water Alabama 2016 Seminar, <u>AU-ESCTF Research</u> <u>Updates</u>, Madison, AL, Aug. 24, 2016.
- 9. **Perez, M.A.**, Zech, W.C.*, and Donald, W.N. Alabama Stormwater Symposium, <u>Introduction of Excel Based Tool SEDspread,</u> Auburn, AL, May. 11, 2016.
- 8. **Perez, M.A.**, Zech, W.C., and Donald, W.N.* Alabama Stormwater Symposium, <u>The Use of Unmanned Aerial Systems in Construction Site Erosion and Sediment Control Inspections</u>, Auburn, AL, May. 11, 2016.
- 7. **Perez, M.A.*,** Brantley, E.*, Norton, E.*, Oakes, P.*, and Kitchens, J.* Alabama Technology Transfer Center Seminar, Erosion Control, Sediment Control, and Stormwater Management on Construction Sites, Mobile, Montgomery, Huntsville, Pelham, AL, Mar. 23-24, 30-31, 2016.
- 6. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.*** Alabama Technology Transfer Center Seminar, <u>Innovative Erosion & Sediment Control Field Day</u>, Opelika, AL, Nov. 20, 2015.
- 5. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.*** Alabama Technology Transfer Center Seminar, <u>Erosion & Sediment Control Hands-On Field Installer Workshop</u>, Opelika, AL, Nov. 18-19, 2015.
- 4. **Perez, M.A.***, Zech, W.C., and Donald, W.N. Clear Water Alabama 2015 Seminar, <u>Drone Technology Presentation & Demonstration</u>, Tuscaloosa, AL, Sep. 3, 2015.
- 3. **Perez, M.A.***, Zech, W.C., and Donald, W.N. 58th Annual Transportation Conference, <u>Using Unmanned Aerial Vehicles</u> (<u>UAVs</u>) to <u>Conduct Site Inspections of Erosion and Sediment Control</u>, Advanced Technologies Technical Session, Montgomery, AL, Feb. 10, 2015.
- 2. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.*** Alabama Technology Transfer Center Seminar, <u>Erosion & Sediment Control</u> <u>Field Day</u>, Opelika, AL, Nov. 3, 2014.
- Perez, M.A.*, Zech, W.C., Donald, W.N., and Fang, X. Alabama Technology Transfer Center Seminar, <u>Inlet Protection Practice Evaluations and Improvements</u>, Innovative Erosion & Sediment Control Research & Field Day, Auburn, AL, May 29-30, 2014.

Local level:

- 13. Sauer, P.*, and **Perez, M.A.*** Iowa Stormwater Education Partnership, <u>Iowa Certified Stormwater Pollution Prevention Plan (SWPPP) Designer Training</u>, Ankeny, IA, Nov. 7, 2018. .
- 12. **Perez, M.A.***, Zech, W.C., Donald, W.N., Vasconcelos, J.G., Fang, X., and Whitman, J.B., Fox Engineering Lunch & Learn, *Innovative Stormwater Treatment Practices Developed Through Large-Scale Testing Efforts*, Ames, IA, Oct. 3, 2018.
- 11. Sauer, P.*, and **Perez, M.A.*** lowa Stormwater Education Partnership, <u>lowa Certified Construction Site Pollution</u>

 Prevention Inspector Training, Ames, IA, Apr. 14, 2018.
- 10. Sauer, P.*, and **Perez, M.A.*** Iowa Stormwater Education Partnership, <u>Iowa Certified Stormwater Pollution Prevention Plan (SWPPP) Designer Training</u>, Ames, IA, Feb. 24, 2018.
- 9. Sauer, P.*, and **Perez, M.A.*** Iowa Stormwater Education Partnership, <u>Iowa Certified Stormwater Pollution Prevention Plan (SWPPP) Designer Training</u>, Ankeny, IA, Dec. 8, 2017.

- 8. **Perez, M.A.***, Zech, W.C., Vasconcelos, J.G., and Fang, X. ASCE Central Iowa Younger Member Group Lunch and Learn, *Large-Scale Performance Enhancement Study of Sediment Basin Technology*, Des Moines, IA, Dec. 12, 2017.
- 7. **Perez, M.A.***, Zech, W.C., Donald, W.N., and Fang, X. USDA|NRCS Lunch and Learn, <u>SEDspread: Construction Site</u> <u>Sediment Basin Design Tool</u>, Auburn, AL, Sep. 22, 2016.
- 6. Donald, W.N*., Zech, W.C., **Perez, M.A.**, and Fang, X. ALDOT and City of Mobile MS4 Lunch and Learn for Contractors, Engineers, and Construction Professionals, *Evaluation and Enhancement of Runoff Control Practices using Large-Scale Testing Techniques*, Mobile, AL, July 25, 2016.
- 5. **Perez, M.A.***, Zech, W.C., and Donald. Ft. Benning Chapter of the Society of American Military Engineers Meeting, *Drones for Construction Site Inspections*, Columbus, GA., Jan. 21, 2016.
- 4. **Perez, M.A.*** Distinguished Engineering Graduate Student Seminar, <u>Application of Unmanned Aerial Systems in Construction Site Erosion and Sediment Control Inspections</u>, Auburn, AL, Nov. 5, 2015.
- 3. Zech, W.C.*, Donald, W.N., and **Perez, M.A.** Dothan Chapter of the American Society of Civil Engineers Meeting, <u>Current and Ongoing Research: Auburn University Erosion & Sediment Control Testing Facility</u>, Dothan, AL, Sep. 2, 2015.
- 2. Zech, W.C.*, Donald, W.N.*, and **Perez, M.A.***, City of Auburn Erosion & Sediment Control Workshop, <u>Current & Ongoing</u>
 <u>Research: Auburn University Erosion and Sediment Control Testing Facility</u>, Auburn, AL, Dec. 11, 2014.
- 1. **Perez, M.A.*** Florida State University Florida A&M University College of Engineering, American Society of Civil Engineers-Florida Engineering Society Student Chapter, <u>Auburn University Civil Engineering Graduate School and Current Research</u>, Tallahassee, FL, Oct. 16, 2014.

Paper presentations at professional meetings:

Note: *indicates presenter(s)

- 26. **Perez, M.A.***, Zech, W.C., Donald, W.N. and Fang, X. 18th Annual International Erosion Control Association (IECA) Conference, <u>Sizing Sediment Basins for Site-Specific Conditions</u>, Long Beach, CA. Feb. 13, 2018.
- 25. Basham, D.L.*, Zech, W.C., Donald, W.N., and **Perez, M.A.** 18th Annual International Erosion Control Association (IECA) Conference, <u>Design and Construction of a Catch Basin Insert Testing Apparatus for Performance Evaluation</u>, Long Beach, CA. Feb. 13, 2018.
- Basham, D.L.*, Zech, W.C., Donald, W.N., and Perez, M.A., Transportation Research Board 97th Annual Meeting, <u>Design and Construction of a Catch Basin Insert Testing Apparatus for Performance Evaluation</u>, TRB Paper No.: 18-01527, Lectern Session 208, Managing Highway Stormwater Runoff, Washington, D.C., Jan. 8, 2018.
- 23. Horne, M.A.*, Zech, W.C., Donald, W.N., and **Perez, M.A.**, Transportation Research Board 97th Annual Meeting, <u>Design and Construction of a Pressurized Rainfall Simulator for Performance-Based Testing of Erosion Control Practices</u>, TRB Paper No.: 18-01268, Lectern Session 208, Managing Highway Stormwater Runoff, Washington, D.C., Jan. 8, 2018.
- 22. **Perez, M.A***, Zech, W.C., Vasconcelos, J.G., and Fang, X. Transportation Research Board 97th Annual Meeting, <u>Large-Scale Performance Testing of Temporary Sediment Basin Treatments and High-Rate Lamella Settlers</u>, TRB Paper No.: 18-00486, Lectern Session 208, Managing Highway Stormwater Runoff, Washington, D.C., Jan. 8, 2018.
- 21. **Perez, M.A.***, Zech, W.C., and Fang, X., 17th Annual International Erosion Control Association (IECA) Environmental Connection Conference, <u>SEDspread: A Sediment Basin Design Tool for Construction Sites</u>, Erosion & Sediment Control Session, Atlanta, GA. Feb. 2017.
- 20. **Perez, M.A.***, Zech, W.C., Fang, X., and Vasconcelos, J., 17th Annual International Erosion Control Association (IECA) Environmental Connection Conference, <u>Large-Scale Performance Evaluations of High Rate Lamella Settlers in Sediment Basin Applications</u>, Erosion & Sediment Control Session, Atlanta, GA. Feb. 2017.
- 19. Bugg, R.A.*, Zech, W.C., Donald, W.N., and **Perez, M.A.,** 17th Annual International Erosion Control Association (IECA) Environmental Connection Conference, <u>Performance Evaluation of Sediment Barriers for Construction Applications using Full-Scale Testing Methods</u>, Erosion & Sediment Control Session, Atlanta, GA. Feb. 2017.
- 18. Bugg, R.A.*, Zech, W.C., Donald, W.N., and **Perez, M.A.**, Transportation Research Board 96th Annual Meeting, <u>Performance Evaluation of Three Silt Fences Using a Full-Scale Testing Apparatus</u>, TRB Paper No.: 17-06419, Lectern Session 708, Solutions for Improved Water Quality, Washington, D.C., Jan. 10, 2017.
- 17. **Perez, M.A.***, Zech, W.C., Donald, W.N., Turochy, R.E., and Fagan, B.G.*, Transportation Research Board 96th Annual Meeting, <u>Transferring Innovative Research Results into Industry Practice at the Auburn University Erosion and <u>Sediment Control Testing Facility</u>, TRB Paper No.: 17-00013, Technology Transfer Committee, Washington, D.C., Jan. 9, 2017.</u>

- 16. **Perez, M.A.***, Zech, W.C., Fang, X., and Vasconcelos, J.G., 16th Annual International Erosion Control Association (IECA) Environmental Connection Conference, *Large-Scale Performance Enhancement Study of Sediment Basin Technology*, Erosion & Sediment Control Session, San Antonio, TX. Feb. 16-19, 2016.
- 15. **Perez, M.A.**, Zech, W.C.*, Donald, W.N., and Fang, X. 16th Annual International Erosion Control Association (IECA) Environmental Connection Conference, <u>Performance Comparisons of Construction Inlet Protection Practices</u>. Erosion & Sediment Control Session, San Antonio, TX. Feb. 16-19, 2016.
- 14. **Perez, M.A.***, Zech, W.C., Fang, X., and Vasconcelos, J.G., Transportation Research Board 95th Annual Meeting, <u>Methodology and Development of Large-Scale Sediment Basin for Performance Testing</u>, TRB Paper No.: 16-0012, Lectern Session, 686: Solutions to Improved Highway Runoff Water Quality, Washington, D.C., Jan. 12, 2016.
- 13. **Perez, M.A.***, Zech, W.C.*, Donald, W.N., and Fang, X., Transportation Research Board 95th Annual Meeting, <u>Development of SEDspread: Robust Construction Site Sediment Basin Design Tool</u>, TRB Paper No.: 16-2559, Poster Session, 586: Soil Erodibility and Sediment Basins and Barriers, Washington, D.C., Jan. 12, 2016.
- 12. Bugg, R.A., Zech, W.C.*, Donald, W.N., and **Perez, M.A.*,** Transportation Research Board 95th Annual Meeting, <u>Design and Construction of a Large-Scale Test apparatus for Sediment Barrier Performance Evaluations</u>, TRB Paper No.: 16-2360, Poster Session, 586: Soil Erodibility and Sediment Basins and Barriers, Washington, D.C., Jan. 12, 2016.
- 11. **Perez, M.A.**, Zech, W.C.*, Donald, W.N., and Fang, X. <u>Enhanced Inlet Protection Practices Developed through Large-Scale Testing</u>, 2nd Annual U.S. EPA Region 5 International Erosion Control Association (IECA) Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session, Atlanta, GA. June 15, 2015.
- 10. **Perez, M.A*.**, Zech, W.C., and Donald, W.N., <u>Drones: The Future of Erosion and Sediment Control Site Inspections</u>, 2nd Annual U.S. EPA Region 5 International Erosion Control Association (IECA) Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session, Atlanta, GA. June 15, 2015.
- 9. **Perez, M.A.**, Zech, W.C.*, Donald, W.N., and Fang, X. 15th Annual International Erosion Control Association (IECA) Environmental Connection Conference, <u>Evaluation of Inlet Protection Practice (IPP) Installations using Large-Scale Testing Techniques</u>. Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 18, 2015.
- 8. Donald, W.N.*, Zech, W.C., Fang, X., and **Perez, M.A.** 15th Annual International Erosion Control Association (IECA) Environmental Connection Conference, <u>Using Hydraulic Performance to Characterize Ditch Check Practices</u>. Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 16 & 18, 2015.
- 7. **Perez, M.A.***, Zech, W.C., and Donald, W.N. 15th Annual International Erosion Control Association (IECA) Environmental Connection Conference, "Drones": Revolutionizing Erosion and Sediment Control Site Inspections. Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 16, 2015.
- 6. Donald, W.N., Zech, W.C.*, Fang, X., and **Perez, M.A.** Transportation Research Board 94th Annual Meeting, *Evaluation* and Modification of Wire Backed, Nonwoven Filter Fabric Silt Fence for use as a Ditch Check, TRB Paper No.: 15-1646, Lectern Session, 610: Water Quality Technology Improvements and Research, Washington, D.C., Jan. 13, 2015.
- 5. **Perez, M.A.***, Zech, W.C., Donald, W.N., and Fang, X. Transportation Research Board 94th Annual Meeting, Perez, *Installation Enhancements to Common Inlet Protection Practices (IPPs) using Large-Scale Testing Techniques*, TRB Paper No.: 15-1607, Lectern Session, 610: Water Quality Technology Improvements and Research, Washington, D.C., Jan. 13, 2015.
- 4. **Perez, M.A.**, Zech, W.C.*, Donald, W.N., and Fang, X. Transportation Research Board 94th Annual Meeting, <u>A Geographic Information System (GIS) Approach for Calculating Runoff Characteristics for Erosion and Sediment Control Practices</u>, TRB Paper No.: 15-0647, Lectern Session, 495: Hydraulics Research for Runoff, Scour, and Erosion, Washington, D.C., Jan. 13, 2015.
- 3. **Perez, M.A.***, Zech, W.C., and Donald, W.N. Transportation Research Board 94th Annual Meeting, <u>Using Unmanned Aerial Vehicles (UAVs) to Conduct Site Inspections of Erosion and Sediment Control Practices and Track Project Progression</u>, TRB Paper No.: 15-4472, Lectern Session, 332: Extracting Information from Images: Technology Innovations in Sensing and Detection, Washington, D.C., Jan. 12, 2015.
- 2. **Perez, M.A.***, Zech, W.C., Donald, W.N., and Fang, X. 14th Annual International Erosion Control Association (IECA) Environmental Connection Conference, *Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques*. Erosion & Sediment Control Session, Nashville, TN. Feb. 27, 2014.
- Perez, M.A.*, Zech, W.C., Donald, W.N. Transportation Research Board 93rd Annual Meeting, <u>Methodology Development</u> for Evaluating Inlet Protection Practices (IPPs) Using Large-Scale Testing Techniques, Paper No.: 14-4644, Lectern Session 816: Hydraulic Analysis of Scour for Bridge and Inlet Protection Applications, Washington, D.C., Jan. 15, 2014.

Funded Grants and Contracts (Total: \$1,577,933 | PI: \$727,639 | Co-PI: \$850,294):

- 12. **Perez, M.A.**, Ikuma, K., and Rehmann, C., <u>In-Situ Performance Evaluation of Bioretention Intake Systems</u>. Iowa Department of Agriculture and Land Stewardship and City of Johnston, IA, \$72,702, 2019 2020.
- 11. **Perez, M.A.**, Ikuma, K., and Rehmann, C., <u>Performance Monitoring of Post-Construction Detention Basins</u>. City of Clive, IA, \$47,845, 2019 2020.
- 10. **Perez, M.A.**, Poleacovschi, C., Doran, E., Abraham, W., and Yuen, T., <u>Uncovering the Effects of Stereotype Threats on Latinx Students' Success in Undergraduate Engineering</u>. National Science Foundation, \$189,000, 2019 2021.
- 9. Poleacovschi, C., **Perez, M.A.**, Cetin, B., Cetin,K., and Gallus W., <u>NNA Track 2: Responding to the Housing Crisis in the Arctic: A Transdisciplinary Approach across Physical, Natural, and Social Systems</u>. National Science Foundation, \$250,000, 2020 2021.
- 8. **Perez, M.A.**, and Cetin, B., *Field and Laboratory Testing of Construction Site Erosion and Sediment Control Practices*. Nebraska Department of Transportation, \$190,000, 2019-2020¹.
- 7. Rehmann, C., Ikuma, K., Cetin, B., and **Perez, M.A.**, <u>Environmental Field Evaluation of Potassium Acetate for Highway Deicing</u>. Minnesota Department of Transportation, \$193,383, 2019-2021.
- 6. Cetin, B., Ceyan, H., and **Perez, M.A.** *Recycled Concrete Grinding Residue*. Recycled Materials Resources Center and Iowa Department of Transportation, \$90,000, 2018-2020.
- Rehmann, C., Perez M.A., Rutherford, C., and Isenhart, T. <u>Hydrologic Evaluation of Saturated Buffers as a Conservation</u>
 <u>Drainage Practice for Agricultural Subsurface Drainage Treatment</u>. Iowa Nutrient Research Center, \$97,911, 2018-2020.
- Rutherford, C., Perez, M.A., Rehmann, C., and Isenhart, T. <u>Evaluation and Enhancement of Saturated Buffers as a Conservation Drainage Practice for Agricultural Subsurface Drainage Treatment</u>. U.S. Dept. of Agriculture Natural Resource Conservation Service, \$150,000, 2018-2020.
- 3. **Perez, M.A.** and Cetin, B. *Field Monitoring of Erosion and Sediment Control Practices and Development of Additional Iowa*<u>DOT Design Manual Guidance</u>. Iowa Department of Transportation SP&R, \$220,000, 2018-2020.
- 2. **Perez, M.A.** *Groundwater Systems Impacts on the U.S. 63 Railroad Underpass at Waterloo, IA*. lowa Department of Transportation, \$198,092, 2018-2020.
- 1. Zech, W.C., Montgomery, J., and **Perez, M.A.** *Evaluation of Unmanned Aerial Vehicles (UAVs) for use in Conducting Site Inspections and Tracking Project Progression*, Auburn University Highway Research Center, \$39,000, 2016-2017.
- Notes: ¹ Project awarded, but canceled during transition from Iowa State University to Auburn University, not included in total funding calculation.

Pending Grants and Contracts:

Grant Proposals Prepared, Not Funded:

- 11. Perez, M.A., Alleman, J., and Singh, V., Invasives to Energy. Illinois State Toll Highway Authority, \$298,000.
- 10. Perez, M.A., and Karabulut-Ilgu, A., New Course Development: CE594W. lowa State University ELO, \$9,000.
- 9. **Perez, M.A.**, Cetin, B., and Ikuma, K., *Field and Laboratory Evaluation of Roadside Soil Quality Restoration Practices*. Iowa Living Roadway Trust Fund, \$52,777.
- 8. **Perez, M.A.**, and Ikuma, K., In-Situ Performance Evaluation of Bioretention Intake Systems. *Iowa State Soil Conservation and Water Quality Committee*, \$78,505.
- 7. **Perez, M.A.**, Cetin, B., Ikuma, B., and Cruse R., *Evaluation of Soil Quality Restoration Methods*. Iowa Nutrient Research Center, \$135,999.
- 6. **Perez, M.A.**, Poleacovschi, C., Doran, E., Abraham, W., and Yuen, T., <u>Collaborative: Research Initiation: Uncovering the Effects of Stereotype Threats on Latina/o Students' Success in <u>Undergraduate Engineering</u>. National Science Foundation, PFE: Research Initiation in Engineering Formation, \$200,000.</u>
- 5. **Perez, M.A.**, Cetin, B., and Rutherford, C., <u>NCHRP 14-41: Permanent Vegetation Control Treatments for Roadsides</u>. National Cooperative Highway Research Program, \$200,000.
- 4. **Perez, M.A.**, and Cetin, B., <u>Topsoil Restoration for Stormwater Runoff Infiltration</u>. Center for Global & Regional Environmental Research and City of Clive, IA, \$35,000.
- 3. **Perez, M.A.**, Ikuma, K., and Rehmann, C., *Urban Stormwater Management Demonstration Station: Stormwater Studio*. lowa Department of Agriculture and Land Stewardship (IDALS), \$180,000.
- 2. **Perez, M.A.**, Cetin, B., and Ikuma, K., <u>Infiltration Capacity Testing of Topsoil Quality Restoration Methods: Phase I.</u> Iowa Water Center and City of Clive, IA, \$90,000.

1. **Perez, M.A.**, Rehmann C., and Ikuma K., <u>Evaluating the Beneficial Effects of Winter Maintenance Best Practices on Water Quality</u>. Illinois Center for Transportation, \$275,000.

GRADUATE STUDENT ADVISING -

Current graduate students (5 Ph.D., 3 M.S.)

Graduate Student	Degree	Year	Undergraduate Institution	Role
	Sought	Started		
8. Patrick Bollinger	Ph.D.	SP19	University of Florida	Co-Adviser
7. Andrea McEachran	M.S.	SP19	Iowa State University	Co-Adviser
6. Loulou Dickey	Ph.D.	SP19	Iowa State University	Co-Adviser
5. Billur Kazaz	M.S.	FA18	Istanbul Technological University, Turkey	Adviser
4. Lan Liu	Ph.D.	FA18	Auburn U. Beijing U. of Civil Eng. & Arch.	Adviser
3. Jessica Taylor	Ph.D.	FA18	Cal Poly, San Luis Obispo	Co-Adviser
2. Jaime Schussler	Ph.D.	SU18	West Virginia University	Adviser
1. Chaitanya Dokala	M.S.	SP18	VIT University, India	Adviser

Served as a committee member (1 Ph.D., 2 M.S.)

Graduate Student	Degree Sought	Year Completed	Position now held, Present employer	Role
3. Yongqiang Gong	Ph.D.	SP19	degree in progress	Committee Member
2. Zhe Wang	M.S.	SP19	degree in progress	Committee Member
1. Jacob Warner	M.S.	FA18	Transportation Eng., EAC Consulting, Orlando, FL	Committee Member

PROFESSIONAL SOCIETY MEMBERSHIP & SERVICE —

International Erosion Control Association

- Committee Chair, Standards & Practices Committee (2017-present)
- Reviewer, Annual Conference (2017-present)
- Committee Member, Great Connections Conference Planning Committee (2017-2018)
- Vice President Southeast Chapter (2017)
- State Representative (Alabama), IECA Southeast Chapter (2015-2017)
- Member, University Partners (2013-present)

Transportation Research Board

- Committee Communications Chair and Member, Stormwater Committee, AFB65 (2017-present)
- <u>Panel Member</u>, Airport Cooperative Research Program (ACRP) Panel S10-15 on "Metrics to Evaluate Airport Performance with the Integration of UAS" (2018-present).

American Society of Civil Engineers

- Excellence in Civil Engineering Education (ExCEEd) Fellow (2018)
- Voted into Membership, Construction Research Congress (2018-present)
- Committee Member, Management Practices for Controlling Erosion and Sediment Standards (2018-present)
- Member (2010-present)

Associated General Contractors of Iowa

- Member and Secretary, Foundation Committee (2018-present)

Journal Reviewer

- Reviewer, TRB Stormwater Committee, AFB65 (2017-present)
- Reviewer, ASCE Journal of Irrigation and Drainage Engineering (2017-present)
- Reviewer, Journal of Water Management Modeling (2017-present)

Auburn University

- Senator, Auburn University Graduate Student Council (2014-2016)
- Graduate Student Advisor, ASCE Auburn University Student Chapter (2012-2016)

Florida State University

- President, Tau Beta Pi - Florida Eta (2011-2012)

- Captain, ASCE FAMU-FSU Student Chapter Concrete Canoe Team (2011-2012)
- Secretary, ASCE and Florida Engineering Society FAMU-FSU Student Chapter (2011-2012)
- <u>Secretary</u>, ASCE and Florida Engineering Society FAMU-FSU Student Chapter (2011-2012)

INSTITUTIONAL SERVICE ACTIVITIES

- Coach, Iowa State University Associated Schools of Construction Region 4 Student Competitions (2018)
- Faculty Mentor, ISU Dept. of Agricultural and Biosystems Engineering Senior Design Team (2018)
- Undergraduate Academic Advisor, Construction Engineering (2018-present)
- Faculty Co-Advisor, Iowa State University, Engineers for a Sustainable World (ESW) Student Chapter (2018-present)
- Faculty Mentor, Iowa State University ESW Campus RainWorks Challenge Team (2017-Present)
- Member, Iowa State University Campus Stormwater Stakeholders Committee (2017-present)
- Coordinator, Annual CCEE #CyGrad Prospective Graduate Student Recruitment Weekend (2017-present)
- Judge, Annual CCEE Poster Competition (2017-Present)