
DIMITRA MICHALAKA, Ph.D., P.E. (SC)

EDUCATION

M.S. in Project Management, (December 2020)

The Citadel, Charleston, SC, USA

Ph.D. in Civil Engineering, focus on Transportation Engineering (August 2012)

University of Florida, Gainesville, FL, USA.

Dissertation: “Enhancement and Evaluation of Dynamic Pricing Strategies of Managed Toll Lanes”

Chair: Dr. Yafeng Yin

M.S. in Civil Engineering, focus on Transportation Engineering (May 2009)

University of Florida, Gainesville, FL, USA

Thesis: “Proactive and Robust Dynamic Pricing Strategies for High Occupancy/Toll Lanes”

Chair: Dr. Yafeng Yin

Diploma in Civil Engineering, (five-year undergraduate program) (November 2006)

National Technical University of Athens, Athens, Greece

Thesis: “Characteristics and number of transfers between urban transport modes: Analysis using Poisson regression”

Chair: Dr. Matthew Karlaftis

PROFESSIONAL CERTIFICATION

Licensed Professional Engineer, State of South Carolina (since December 2016)

EMPLOYMENT HISTORY

Professor (August 2025 to present)

Emmett Davis Department of Civil, Environmental & Construction Engineering

The Citadel, Charleston, SC, USA.

Associate Professor (August 2019 to July 2025)

Department of Civil and Environmental Engineering, The Citadel, Charleston, SC, USA.

Assistant Professor (January 2014 to July 2019)

Department of Civil and Environmental Engineering, The Citadel, Charleston, SC, USA.

Adjunct Lecturer/ Postdoc Researcher (August 2012 to December 2013)

Department of Civil and Coastal Engineering and Department of Urban and Regional Planning, University of Florida, Gainesville, FL, USA.

Graduate Research Assistant (January 2010 to August 2012)

Department of Civil and Coastal Engineering, University of Florida, Gainesville, FL, USA.

Transportation Engineer (June 2009 to December 2009)

Transportation Research Center, CMS.

Department of Civil and Coastal Engineering, University of Florida, Gainesville FL, USA.

Graduate Research Assistant (August 2007 to May 2009)

Department of Civil and Coastal Engineering, University of Florida, Gainesville, FL, USA.

Research Assistant (November 2006 to June 2007)

School of Civil Engineering, National Technical University of Athens, Greece.

Transportation Engineer (November 2006, April 2006 to May 2006, November 2005)

Trademco S. A., Athens, Greece.

Intern (July 2005 to August 2005)

Public Power Corporation of Greece, Islands Region Department, Athens, Greece.

RESEARCH EXPERIENCE

Professor (August 2025 to present)

Emmett Davis Department of Civil, Environmental & Construction Engineering

- Researcher, “*NSF IUSE/PFE:RED Planning: Persistence, Propensity to Learn, and Professional Enculturation: Uniting Civil and Construction Engineering Programs to Train Flexible Experts*”.
- Principal Investigator (PI), “*Generative AI and Augmented Reality/Mixed Reality for Enhanced College Engineering Student Experience*” sponsored by The Citadel School of Engineering (on-going).
 - Create an immersive environment that bridges theoretical concepts with real-world applications

Visiting Scholar (August 2023 to December 2023)

Department of Values, Technology and Innovation, Faculty of Technology, Policy and Management, Building 31, Office: C1.010, TUDelft, Netherlands

- Principal Investigator (PI), “*Potential Impacts of Connected and Automated Vehicles to Fatal Crashes*” (completed)

Associate Professor (August 2019 to July 2025)

Department of Civil, Environmental, and Construction Engineering, The Citadel, Charleston, SC, USA.

- Principal Investigator (PI), “*Generative AI and Augmented Reality/Mixed Reality for Enhanced College Engineering Student Experience*” sponsored by The Citadel School of Engineering (on-going).
 - Create an immersive environment that bridges theoretical concepts with real-world applications
- Principal Investigator (PI), “*Safety and Health Impacts of Mobility Alternatives Technology Transfer*” sponsored by C²M² Tier 1 UTC Center r.
 - Developed and execute a comprehensive technology transfer plan for the already completed C²M² projects
- Principal Investigator (PI), “*Assessing Transportation Infrastructure Segments for Bike Suitability*” sponsored by C²M² Tier 1 UTC Center
 - Collected motion and vibration data using instrumented bicycles at more than 20 street segments in downtown Charleston, and several other streets in Columbia, SC, and Lincoln, NE.
 - Analyzed the collected data using GIS (Geographic Information System) and GPS (Global Positioning System) to detect anomalies on cycling paths.
- Co-Principal Investigator (PI), “*A Framework to Promote Diversity and Inclusion in Workforce Development in Southeast States*” sponsored by USDOT through Southeastern Transportation Research, Innovation, Development and Education Center (STRIDE) Regional Center.
 - Reviewed the state of practice on diversity in workforce.
 - Developed an Equity, Diversity, and Inclusion (EDI)-focused leadership workshop.
 - Developed an EDI Framework for Transportation Workforce Development in Southeast USA.

- Researcher, “*A Cloud-based Quantum Artificial Intelligence-supported Automated Truck Platooning Strategy to Reduce Energy Consumption and Enhance Mobility*”, sponsored by USDOT through C²M² Tier 1 UTC Center.
 - Developed a truck platoon formation algorithm with a view to achieve energy efficiency for both connected/automated trucks and other non-truck traffics using cloud-supported predictive Q-AI algorithm.
 - Developed and evaluate the Q-AI based platooning algorithm using a simulated corridor.
 - Conducted the final real-world evaluation in a controlled testbed in Greenville, SC to demonstrate the feasibility of the Q-AI algorithms.
- Researcher, “*Potential Reduction of Fatal Crashes in South Carolina due to Connected and Automated Vehicles (CAVs)*”, sponsored by USDOT through C²M² Tier 1 UTC Center.
 - Identified how safety-related driving parameters for CAVs differ across varying levels of autonomy.
 - Examined how these parameters lead to different crash outcomes (e.g., no crash, non-fatal crash) compared to known fatal crashes from the last three years in SC.
 - Identified CAV capabilities most effective in reducing fatal crashes.
 - Identified future research initiatives related to this initial research work.
 - Helped DOTs to establish priorities for infrastructure investments and policies for implementation of CAV capabilities.
- Co-PI, “*Transportation Workforce Development Related to Traffic Signal Systems – Phase II (Technology)*” sponsored by USDOT through STRIDE Regional Center (completed).
 - Identified technological courses specific to traffic signal systems in the Southeast Region, USA.
 - Developed a hybrid (virtual and in-person) workforce development summit framework for technician, engineer, and planners related to traffic signal systems.
 - Administered and hosted hybrid a technology workforce development summit week.
- Researcher, “*Evaluation of Transportation Network Infrastructure, Safety, and Travel Route Characteristics of Bike Share, Electric-Powered Pedal-Assist Bike Share, and Electric Scooter System Operation*” sponsored by USDOT through STRIDE Regional Center.
 - Established a better understanding of these travel modes to accommodate shared mobility demand.
 - Identified operational patterns of use of the transportation network infrastructure.
 - Catalogue critical elements of system implementation to be addressed by local jurisdictions.
 - Evaluated potential for serving as an effective countermeasure to urban network congestion for mid-size cities.
- Researcher, “*Assessing Potential of Bike Share Networks and Active Transportation to Improve Urban Mobility, Physical Activity and Public Health Outcomes in South Carolina*”, sponsored by USDOT through C²M² Tier 1 UTC Center.
 - Examined bicycling and walking patterns in various types of built environments (e.g., streets, greenways, multi-use biking and walking paths) in Charleston, SC.
 - Evaluated user perceptions and motivations for biking and walking in Charleston, SC.

- Analyzed geospatial and quantitative data using an integrated multidimensional GIS (Geographic Information System) database and GPS (Global Positioning System) route tracking data from the bike share system.
 - Engaged local officials, decision makers, and community stakeholders through effective summary of data analysis and results (e.g., infographics, formal meeting)
 - Presented findings in national forums for the engineering profession, city planning officials, municipalities and stakeholders via strategic technology transfer channels.
- PI, “*STRIDE Transportation Curriculum*” sponsored by USDOT through STRIDE Regional Center.
 - Developed a K-12 curriculum on transportation planning and technology that can be used in middle and high school classrooms and outreach enrichment programs. The curriculum will include topics that are currently not found in existing curricula related to transportation.
- Co-PI, “*Transportation Workforce Development for State DOTs to Address Congestion for the Southeast Region*” sponsored by USDOT through STRIDE Center.
 - Established a working definition of workforce development.
 - Identified the prevailing challenges in the transportation workforce.
 - Summarized the state of workforce development practice.
 - Identified the role UTCs might play as a partner in responding to workforce development challenges.
 - Proposed actionable suggestions for the improvement of transportation workforce development in the Southeastern USA region.
- PI, “*Understanding Relationships between the Built Environment, Physical Activity, Public Health, Urban Mobility, and Traffic Congestion: Graduate Curriculum Development*” sponsored by USDOT through STRIDE Regional Center.
 - Developed a course that brought together content from physical activity, public health, civil engineering, and transportation planning and community design.
- Researcher, “*C²M² Quantum Computing Lab*”, sponsored by USDOT through C²M² Tier 1 UTC Center.
 - Brought together researchers from five C²M² partner universities from the state of South Carolina to solve the complex transportation issues using Q-AI to better equip the future transportation professionals with much-needed quantum computing skills for the emerging quantum computing era.
- PI, “*Strategies for Mitigating Congestion in Small Urban and Rural Areas*”, sponsored by USDOT through STRIDE Regional Center.
 - Determined key characteristics of rural and small urban congestion (e.g. recurring and non-recurring congestion, mode use, freight logistics, and special events);
 - Identified resource constraints pertinent to rural and small urban communities;
 - Identified strategies to reduce and/or manage these congestion issues;
 - Developed guidance that maps strategies to congestion issues for use by rural and small urban agencies; and
 - Developed educational material (i.e. webinar, online module, short course, etc.) for use by rural and small urban agencies to help ensure successful implementation of developed guidance.

Assistant Professor (January 2014 to July 2019)

Department of Civil and Environmental Engineering, The Citadel, Charleston, SC, USA.

- Researcher, “*Active Traffic Monitoring through Camera Networks with Automatic Camera Calibration for Pan-Tilt-Zoom Cameras*”, sponsored by USDOT through C²M² Tier 1 UTC Center.
 - Improved an automated processing of video from a persistent surveillance camera array to extract traffic data from a 25 square mile area.
- Researcher, “*Assessment of Safety Benefits of Technologies to Reduce Pedestrian Crossing Fatalities at Midblock Locations*”, sponsored by USDOT through C²M² Tier 1 UTC Center.
 - Characterized pedestrian nighttime crashes to gain a complete understanding of qualitative and quantitative aspects of these crashes.
 - Identified areas of high pedestrian crash potential around the state, what roadway design features are most common at crash sites, and which population demographics are most at risk.
 - Assessed the potential of autonomous vehicles to bring a paradigm shift in pedestrian and vehicle interactions.
 - Recommended short-term implementation solutions based on the patterns identified in the crash data analysis.
- PI, “*Engineering Education*”.
 - Examined how to use different learning techniques to enhance student learning and motivation.
 - Examined how to enhance students’ teamwork skills.
 - Studied how small teaching changes can lead to great improvements.
- PI, “*Mini-roundabouts*”, sponsored by The Citadel.
 - Studied mini-roundabouts and identified locations where mini-roundabouts can be implemented in S.C.
- PI, “*Navigation of Pedestrians and Bicycles at Roundabouts and its Impact to Vehicular Capacity*”, sponsored by The Citadel.
 - Examined how pedestrians and bicyclists navigate through roundabouts, and how the movement of pedestrians and bicycles influence the capacity and throughput of vehicle traffic at roundabouts. The research involved data collection at selected roundabouts in Charleston, SC area.
- Researcher, “*Roundabouts and Access Management*”, sponsored by The Citadel.
 - Conducted an operational analysis of selected roundabouts in Charleston, SC area. The operational analysis examined how roundabouts perform relatively to other types of un-signalized intersections and how they can enhance access management located in their vicinity.
- Researcher, “*Roundabouts and Access Management*”, sponsored by the Florida Department of Transportation (FDOT).
 - Reviewed literature on roundabouts and their application throughout the United States (U.S.) to understand how access management, capacity, and safety are addressed, and to recommend changes in guidance documents in Florida including the access management resources, Median Handbook, and Driveway Information Guide.
- Researcher, “*Deployment Strategies of Managed Lanes on Arterials*”, sponsored by FDOT.
 - Identified the types of managed lanes and their variants with potentials for managing traffic along arterials in Florida.

Adjunct Lecturer/ Postdoc Researcher (August 2012 to December 2013)

Department of Civil and Coastal Engineering and Department of Urban and Regional Planning, University of Florida, Gainesville, FL, USA.

- Researcher, “Roundabouts and Access Management”, sponsored by the Florida Department of Transportation (FDOT).
 - Reviewed literature on roundabouts and their application throughout the United States (U.S.) to understand how access management, capacity, and safety are addressed, and to recommend changes in guidance documents in Florida including the access management resources, Median Handbook, and Driveway Information Guide.
- Researcher, “Deployment Strategies of Managed Lanes on Arterials”, sponsored by FDOT.
 - Identified the types of managed lanes and their variants with potentials for managing traffic along arterials in Florida.
- Researcher, “Central Data Warehouse (CDW) Enhancements Part 3”, sponsored by FDOT and the Center of Multimodal Solutions for Congestion Mitigation (CMS), University of Florida.
 - Analyzed traffic data and identified detectors that provide erroneous data.
 - Worked with the SunGuide transportation management centers (TMCs) and FDOT offices to recalibrate inaccurate detectors.
- Researcher and project manager, “Florida Minority Occupant Protection Task Force”, sponsored by the U.S. DOT.
 - Worked towards increasing the safety belt use with the African American and Hispanic communities in the City of Jacksonville, FL. Project tasks I was involved included but were not limited to: identification and selection of promotional and educational materials, distribution of the materials, and use of statistical analysis to examine the results from the Pre and Post Safety Belt Observational surveys and identify the increase of safety belt use with the African American and Hispanic communities.
- Professional Workshop Developer, “Managed Lane Operations-Adjusted Time of Day Pricing vs. Near Real Time Dynamic Pricing” workshop series.
 - Developed and delivered a two-part training on managed lane operations. A web-based part and a hands-on lab instruction part.

Graduate Research Assistant (January 2010 to August 2012)

Department of Civil and Coastal Engineering, University of Florida, Gainesville, FL, USA.

- Researcher, “Managed Lane Operations-Adjusted Time of Day Pricing vs. Near Real Time Dynamic Pricing”, funded by FDOT and CMS.
 - Conducted research on High Occupancy/ Toll (HOT) lanes.
 - Examined pricing models as well as different management strategies for multi-segment HOT lanes.
 - Developed a procedure to optimize the pricing algorithms implemented in practice based on genetic algorithms (GAs).
 - Validated the procedure developed by optimizing the pricing algorithm currently implemented on the 95 Express in South Florida.
- Researcher and project manager, “Enhancing CORSIM for simulating HOT lanes”, funded by CMS.
 - Developed three sets of modeling components to demonstrate simulation of HOT lane operations. The first component implements three pricing strategies; including responsive pricing, a closed-loop-control-based algorithm, and time-of-day pricing.

The second component mimics drivers' lane choice behaviors in the presence of tolls, and the third represents different toll structures for multi-segment HOT lane facilities.

- Enhanced traffic simulation program, CORSIM, to simulate HOT lanes by incorporating these new modeling components.
- Validated the enhanced software by conducting simulation experiments involving the 95 Express network in South Florida.
- Supervisor of undergraduate and master students.

Transportation Engineer (June 2009 to December 2009)

Transportation Research Center, CMS.

Department of Civil and Coastal Engineering, University of Florida, Gainesville FL, USA.

- Researcher, "Validation and Enhancement of the Highway Capacity Manual's Interchange Ramp Terminal Methodology", sponsored by the American Association of State Highway and Transportation Officials, in cooperation with the Federal Highway Administration, and was conducted in the National Cooperative Highway Research Program, which is administered by the Transportation Research Board of the National Research Council.
 - Assisted in the development of Chapters 22 (Interchange Ramp Terminals) and 34 (Interchange Ramp Terminals – Supplemental) of the 2010 Highway Capacity Manual.
 - Assisted in the development of the operational analysis procedures of eight fundamental types of interchanges.
 - Analyzed field data to determine parameter values in the lane utilization models for external arterial approaches of different types of interchanges (Diamond, Parclo A-2Q, B-2Q, B-4Q, AB-2Q, and AB-4Q).
 - Assisted in the design of example problems for the demonstration of the different methodologies.
 - Worked in the design of the supplemental problems included in Chapter 34.
- Assistant on developing research proposals, including the "Enhancing CORSIM for simulating HOT lanes" project which was accepted and funded by CMS.
- Supervisor of undergraduate and graduate students.

Graduate Research Assistant (August 2007 to May 2009)

Department of Civil and Coastal Engineering, University of Florida, Gainesville, FL, USA.

- Researcher, "A Pricing Approach for Mitigating Congestion in Multi-Modal Transportation Systems", sponsored by Department of Transportation, Research and Innovative Technology Administration.
 - Developed a robust and proactive approach to determine time-varying tolls for HOT lanes in response to real-time traffic conditions.
 - Conducted simulation experiments using the field data from 95 Express in Florida to compare the approach developed with the one currently implemented on 95 Express.

Research Assistant (November 2006 to June 2007)

School of Civil Engineering, National Technical University of Athens, Greece.

- Conducted research for the development of educational manuscripts.
- Conducted literature reviews for various manuscripts pertaining to transportation modeling, driving education, and behavior.

Transportation Engineer (November 2006, April 2006 to May 2006, November 2005)

Trademco S. A., Athens, Greece.

- Researcher, “Market Survey for the use of various ticketing systems for Athens Mass Transit”.
 - Developed questionnaires for data collection regarding the ticketing systems options travelers use or willing to use when taking the transit in Athens.
 - Collected data in several transit stations in Athens.
- Researcher, “Origin-Destination identification study in the Airport’s landside road network”
 - Collected numerous O-D data in Athens airport to clearly reflect the trips in and around the airport’s road network.
 - Transcribed the collected data in order to produce files suitably coded to be used as input to the processing software for various projects.

Intern (July 2005 to August 2005)

Public Power Corporation of Greece, Islands Region Department, Athens, Greece.

- Supervised construction conducted at power plants located in the periphery of Greece.

TEACHING EXPERIENCE

Professor (August 2025 to present)

Department of Civil, Environmental, and Construction Engineering, The Citadel.

Courses prepared and taught

- “Statistics for Civil and Construction Engineering” (Fall 2025)
- “Transportation Engineering” (Fall 2025, 1 in-person and 1 online asynchronous section)
- “Surveying Lab” (Fall 2025)

Associate Professor (August 2019 to July 2025)

Department of Civil, Environmental, and Construction Engineering, The Citadel.

Courses prepared and taught

- “Statistics for Civil and Construction Engineering” (Fall 2024, Fall 2022, Fall 2021)
- “Highway Engineering” (Spring 2025, in-person and online asynchronous/hybrid, Spring 2021, 2 online sections; Spring 2020, 2 sections)
- “Geomatics Lab” (Spring 2020, 2 sections)
- “Concrete and Asphalt Lab” (Spring 2021, 2 hybrid sections; Spring 2020, 1 section)
- “Transportation Engineering” (Fall 2024, 1 in-person and 1 online asynchronous section; Fall 2022, 2 sections; Fall 2021, 1 section; Fall 2019, 2 sections)
- “Surveying Lab” (Fall 2021, 2 sections; Fall 2019, 2 sections)

Assistant Professor (January 2014 to July 2019)

Department of Civil and Environmental Engineering, The Citadel.

Courses prepared and taught

- “Transportation Engineering” (Fall 2018, Fall 2017, Fall 2016, Fall 2015, Fall 2014, 12 sections total)
- “Highway Engineering” (Spring 2019, Spring 2018, Spring 2017, Spring 2016, Spring 2015, Spring 2014, 15 sections total)
- “Concrete and Asphalt Lab” (Spring 2019, Spring 2018, Spring 2017, Spring 2016, Spring 2015, Spring 2014, 15 sections total)
- “Engineering Economy” (Fall 2017, Summer I 2016, 3 sections total)
- “Engineering Management” (Summer I 2019, Spring 2017, Fall 2015, Summer II 2015, Summer II 2014, 6 sections total)
- “Surveying Lab” (Fall 2018, Fall 2017, 3 sections total)

- “Geomatics Lab” (Spring 2019, 1 section)
- “Introduction to Civil Engineering” (Fall 2016, Fall 2014, 3 sections total)

Instructor (Summer 2022, Summer 2021, Summer 2020, online instruction)

South Carolina Governor’s School for Science and Mathematics.

- “Engineering Around Town” (5 different camp weeks (2 in 2022, 2 in 2021, 1 in 2020))

Instructor (Summer 2019, Summer 2018, Summer 2016, in person)

South Carolina Governor’s School for Science and Mathematics.

- “Tour of Engineering Summer Camp” (3 different camp weeks, 1 each year mentioned)

Transportation Engineer, Research and Teaching Assistant (2009-2013)

Department of Coastal and Civil Engineering, University of Florida.

- **Guest Lecturer** - “Introduction to Civil Engineering” (Fall 2013, Fall 2011)
- **Instructor** - “Transportation Engineering” (Spring 2013)
- **Instructor** - “Transportation Systems Analysis/ Advanced Transportation Systems” (Fall 2012)
- **Teaching Assistant** - “Traffic Flow Theory” (Fall 2012)
- **Guest Lecturer** “Introduction to Civil Engineering” (Fall 2011)
- **Instructor** “Introduction to Transportation Engineering” (Fall 2010)
- **Lecturer** – “Introduction to Transportation Engineering” (Fall 2009)

HONORS & AWARDS

International Fellowship

- International Road Federation (IRF) Fellow, IRF (2012/2013)

National/Regional Awards

United States

- Charley V. Wootan Award for the paper “Framework for the Development of a Diverse Transportation Workforce in the Southeast Region,” given by the Transportation Research Board (2025).
 - This award is given each year for the best paper in the area of transportation policy and organization and will be presented on Jan. 6th during the 104th Transportation Research Board Annual Meeting in Washington, DC.
- Southern District Institute of Transportation Engineers (SDITE) Excellence in Transportation Engineering Education Award (2022)
 - Recognizes an individual who contributed outstandingly to the education of future leaders in the transportation engineering field and to their local Section or the Southern District ITE.
- South Carolina (SC) Young Civil Engineer of The Year (2017)
 - Awarded to a young engineer under the age of 35 that has demonstrated the most outstanding contribution to the profession in South Carolina.
- ITE Legacy Fund Scholarship to participate at the LeadershipITE program (2017)
 - Awarded annually to develop the next generation of leaders in ITE and the transportation profession
- Mara H. Wasburn Early Engineering Educator Grant, Women in Engineering Division, ASEE (2015).

- Awarded annually to two women planning to pursue a career in engineering education, who have a demonstrated commitment to innovation in teaching, and/or potential for substantial contributions to the field.
- Future Industry Leader Spotlight Award, American Road & Transportation Builders Association (ARTBA), (August 2011)
 - Recognizes two women students enrolled in undergraduate or graduate studies at a U.S. college or university who have achieved an outstanding academic record and demonstrated extraordinary leadership skills within and outside the academic environment.
- Pikarsky Award for Outstanding M.S. Thesis in Science and Technology, Council of University Transportation Research Centers, (December 2009)
 - Given annually to one graduate student in the U.S. in transportation for the best M.S. thesis in science and technology.

Greece

- Award of Excellence for completing the undergraduate studies (3rd Place), Technical Chamber of Greece, (2006)
 - Given annually to the three students who completed their civil engineering undergraduate studies with the highest GPA (five-year program).

University Awards

The Citadel

- Service Award (2021), presented by the Faculty Excellence Committee and The Citadel Provost
 - Given to faculty with remarkable contributions in service.
- New Faculty Excellence Award (2017)
 - Given to new faculty with remarkable achievements in teaching, scholarship and service.
- Faculty Fellow in Service Learning and Civic Engagement (SL&SC), (Summer II, 2014)
 - Given to faculty who develop K-12 STEM activities and help in several STEM outreach efforts.

University of Florida

- Alec Courtelis Award (1st place), International Center, University of Florida (2011)
 - Given annually to the top three international graduate students at UF (UF had about 5,580 international graduate students in 2011), in recognition of their academic excellence and outstanding contribution to the university and community.
- Outstanding International Student Award, College of Engineering, University of Florida (2011, and 2007)
 - Given annually to about ten international graduate students in the college of engineering, in recognition of their academic excellence.
- Gator of Engineering Attribute Graduate Student Award for Leadership, College of Engineering, University of Florida (June 2011)
 - Recognizes one graduate student in the UF college of engineering at the attribute of leadership.

National Technical University of Athens

- Award “Achievement in Mathematics” (1st Place) during first and second year of undergraduate studies, National Technical University of Athens, (2001-2002, 2002-2003)

- Award of Excellence based on GPA (7th Place) during the first year of undergraduate studies, from the National Technical University of Athens (2001-2002)
- Award of Excellence based on GPA (3rd Place) during the second year of undergraduate studies, from the National Technical University of Athens (2002-2003)

Others

- Poster Presentation Award (1st place) at the District 10/ Florida Section ITE 2011 Annual Meeting (December 2011)
- Presentation Award (3rd place) at the CMS Annual Student Conference (March 2011)
- WTS Central Florida Chapter Frankee Hellinger Graduate Scholarship (2011)
- Poster Presentation Award (1st place) at the inaugural TEAMFL poster session (October 2010)

PUBLICATIONS

Journal Articles

- Click, S., Mohebbi, M., Steiner, R., Sisiopiku, V., Hadi, M., **Michalaka, D.**, Sherif, M., Martin, J. B., Griffith, J. (2024). Framework for the Development of a Diverse Transportation Workforce in the Southeast Region *Transportation Research Record*. (TRRPaper - 23-01166R1).
<https://journals.sagepub.com/eprint/7XYUGDNQG2NC7BVHX4ZQ/full>
- Greenburg, D., Huntington, S., **Michalaka, D.**, and Miner, T. (2023). “Applying Agile Business Solutions as a Graduate Project”. *Journal of Higher Education Theory and Practice* (ISSN# 2158-3595). Volume 23(17), 2023.
- Kawsar, S., Biswas, S., Noor, M., Mamun, S. Md, and **Michalaka, D.**, (under review) “Application of COPERT 5.5 Emission Software to Develop Vehicular Emission Inventories, Estimate Lockdown Impact and Predict Future Trend of Emissions for Bangladesh” *Transportation Research Record: Journal of the Transportation Research Board*, 102nd Annual Transportation Research Board, Washington, DC, Jan. 2023.
- Hughey, S.M., Sella, J., Adams, J.D., Porto, S.C., Bornstein, D., Brown, K., Amahrir, S., **Michalaka, D.**, Watkins, K., Davis, J. (2022) It’s Electric! Measuring Energy Expenditure and Perceptual Differences Between Bicycles and Electric-assist Bicycles. *Journal of Transport & Health*.
- Greenburg, D., **Michalaka, D.**, and Righter J., (2021) “Introduction to Problem Solving Using a Monte Carlo Spreadsheet Simulation”. Published at the *Journal of Strategic Innovation and Sustainability*. JSIS 16(2), 2021 Publication.
- Greenburg, D., and **Michalaka, D.**, (2019) “The Impact of an Emergency Bridge Lane Closure and Contraflow Lane Implementation on Travel in Charleston, SC”. *Transportation Research Record: Journal of the Transportation Research Board*, 19-00825, Proceedings of 98th Annual Transportation Research Board, Washington, DC, Jan. 2019.
- Michalaka, D.**, Xu, R., Page, J., Steiner, R., Washburn, S., and Elefteriadou, L., (2016) “Roundabouts as a Form of Access Management”. *Transportation Research Record: Journal of the Transportation Research Board*, Transportation Research Board of National Academies, Washington, D.C., Volume 2556, pp. 1-9, DOI: <http://dx.doi.org/10.3141/2556-01>.
- Hale, D.K., Antoniou, C., Brackstone, M., **Michalaka, D.**, Moreno, A.T., and Parikh, K., (2015) “Comparison of Optimization Methods for Assisted Calibration of Traffic Micro-Simulation”. *Transportation Research Part C*, pp. 100-115. DOI: 10.1016/j.trc.2015.01.018
- Mamun, Md. S., **Michalaka, D.**, Yin, Y., and Lawphongpanich, S. (2014). “Comparison of Socioeconomic Impacts of Market-based Instruments for Mobility Management”, *International Journal of Sustainable Transportation*, Taylor & Francis, 08/12/2014. DOI: 10.1080/15568318.2013.859335.

- Michalaka, D.**, Yin, Y., and Hale, D. (2013). “Simulating High-Occupancy/Toll (HOT) Lane Operations”, *Transportation Research Record: Journal of the Transportation Research Board*, Transportation Research Board of National Academies, Washington, D.C., Volume 2396, pp. 124-132. DOI: 10.3141/2396-14.
- Michalaka, D.**, Lou, Y., and Yin, Y. (2012). “Proactive and Robust Dynamic Pricing Strategies for High-Occupancy/Toll (HOT) Lanes”, *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations* (under re-review).

Conference Proceedings

- Niksiar, P., **Michalaka, D.**, Giogli, E. “Generative Artificial Intelligence for Enhanced Engineering Education; Strengths, Challenges and Validation”. *2025 American Society of Engineering Education (ASEE) Annual Conference*.
- Michalaka, D.**, Laughton, S. “A Preliminary Investigation: Student Summer Internship Activities”. *2024 American Society of Engineering Education (ASEE), Southeastern Section Meeting*.
- Michalaka, D.**, Greenburg, D., Giogli, E., and Shetty, N. “Incorporating Gamification at an Engineering Statistics course to improve student learning and engagement”. *2023 American Society of Engineering Education (ASEE), Southeastern Section Meeting*.
- Greenburg, D., Huntington, S., **Michalaka, D.**, and Miner, T. (under review). “Applying Agile Business Solutions as a Graduate Project”. *2023 ASEE, Southeastern Section Meeting*.
- Kohne, J.N., Sarasua, W., **Michalaka, D.**, Stanley, M., Zou, F., Murray-Tuite, P., and Brown, K., “Potential Reduction of Fatal Crashes in South Carolina due to Automated Vehicles”. *Transportation Research Record: Journal of the Transportation Research Board*, 102nd Annual Transportation Research Board, Washington, DC, Jan. 2023.
- Greenburg, D., **Michalaka, D.**, and Shick, M., (2022). “An Integrated Exercise to Teach Earned Value Management”. *2022 ASEE, Southeastern Section Meeting*.
- Greenburg, D., Huntington, S., and **Michalaka, D.**, (2022). “Developing an Agile Project Management Course for Graduate Students”. *2022 ASEE, Southeastern Section Meeting*.
- Michalaka, D.**, and Giogli, E. (2021). “Student Perceptions on Variety of Class Types due to COVID-19”. *2021 ASEE, Southeastern Section Meeting, Virtual*.
- Greenburg D., **Michalaka D.**, and Vesali-Mahmoud, N. (2021) “Teaching Students to Use Event Base Modeling to Evaluate Schedule Risk” *2021 ASEE, Southeastern Section Meeting, Virtual*.
- Greenburg D., Dimitra **Michalaka**, and Righter J. “Introduction tmio Problem Solving Using a Monte Carlo Spreadsheet Simulation” *2021 ASEE, Southeastern Section Meeting, Virtual*.
- Michalaka, D.**, and Giogli, E. (2020). “Which Skills Are More Important in The Engineering World? Perceptions of College Students, Recent Graduates, and Employers”. *2020 ASEE, Southeastern Section Meeting, Auburn, AL*.
- Michalaka, D.**, and Greenburg, D. (2020). “Assessing Graduate Student Understanding of Leadership Compared to Management”. *2020 ASEE, Southeastern Section Meeting, Auburn, AL*.
- Batouli, M., Wood, T., **Michalaka, D.**, Brown, K., Welch. R. (2020). “Adopting ASCE ExCEED Model for Engineering Education: Lessons Learned and Implementation Strategies”. *2020 ASEE, Southeastern Section Meeting, Auburn, AL*.
- Brown, K., **Michalaka, D.**, Davis, W., “Students' Perception of Performance Before and After Exams in A Surveying Course” *2020 ASEE, Southeastern Section Meeting, Auburn, AL*.
- Brown, K., **Michalaka, D.**, Woo, M. (2019). “The Value of the Involvement of Licensed

- Surveyors in a Surveying Course”. 2019 ASEE, *Southeastern Section Meeting, Raleigh, NC.*
- Wood, T., Book, E., Seyed M.B., **Michalaka, D.**, (2019). “Perspectives on an Innovative Homework Grading Scheme”. 2019 ASEE, *Southeastern Section Meeting, Raleigh, NC.*
- Greenburg, D., and **Michalaka, D.**, (2019). “Student perceptions of how different course types may influence their career”. 2019 ASEE, *Southeastern Section Meeting, Raleigh, NC.*
- Michalaka, D.**, and Greenburg, D. (2019). “Creating a “Learning Lab” in Undergraduate Engineering Management Lecture Courses”. 2019 ASEE, *Southeastern Section Meeting, Raleigh, NC.*
- Michalaka, D.**, and Brown, K. (2018). “Surveying Courses in Civil Engineering”. 2018 ASEE, *Southeastern Section Conference Proceedings.*
- Michalaka, D.**, Rabb, R. J., and Engelhardt, S. M. (2017). “Tour of Engineering Summer Camp for Rising 8th and 9th Graders”. 124th ASEE, *Annual Conference and Exposition, New Columbus, OH.*
- Michalaka, D.**, Davis, W. J., and Brown, K. (2017). “Application of Indirect and Direct Measures for Student Teamwork Outcome Assessment within an Undergraduate Civil Engineering Curriculum”. 124th ASEE, *Annual Conference and Exposition, New Columbus, OH.*
- Michalaka, D.**, and Ghanat, S. (2017). “Study of Pre- and Post-Course Knowledge Surveys in an Engineering Economy Course”. 124th ASEE, *Annual Conference and Exposition, New Columbus, OH.*
- Watson, M.K., Russo, L., and **Michalaka, D.** (2017). “Introduce a Girl to Engineering Day: Assessment of Impact and Future Directions”. 2017 ASEE *Zone II Conference Proceedings. Paper ID S1A3.*
- Davis, J., **Michalaka, D.**, and Brown, K. (2017). “Student Perception of Teamwork Skills and Experiences across Prerequisite Courses in Transportation Engineering at The Citadel”. 2017 ASEE *Zone II Conference Proceedings. Paper ID V2B3.*
- Ghanat, S., **Michalaka, D.**, James M. Grayson. (2017). “Study of Pre- and Post-Course Knowledge Surveys in an Engineering Economy Course”. 2017 ASEE *Zone II Conference Proceedings. Paper ID V3D4.*
- Michalaka, D.**, Ghanat, S., Watson, M.K., Bower, K., and Welch R. “Effects of Classroom Pedagogies Used in a Freshmen Course on Students’ Perception of the Sub-Disciplines of Civil Engineering”. 2016 ASEE *Southeast Section Conference Proceedings.*
- Michalaka, D.**, and Golub, M. (2015). “Effective building and development of student teamwork using personality types in engineering courses”. 122nd ASEE, *Annual Conference and Exposition, New Orleans, LA. Paper ID #17228.*
- Michalaka, D.** and Davis, W.J., (2015). “Application of Active Learning Techniques in Undergraduate Civil Engineering Curriculum”. 122nd ASEE, *Annual Conference and Exposition, Seattle, WA. Paper ID #12271.*
- Davis, W.J., and **Michalaka, D.** (2015). “Teaching and Assessing Professional Skills in an Undergraduate Civil Engineering Curriculum”. 122nd ASEE, *Annual Conference and Exposition, Seattle, WA. Paper ID #12205.*
- Watson, M.K., Ghanat, S.T., **Michalaka, D.**, Bower, K., and Welch, R.W. (2015). “Why Do Students Choose Engineering? Implications for First-Year Engineering Education”. 7th *First Year Engineering Experience (FYEE) Conference Proceedings.*
- Hale, D.K., Antoniou, C., Brackstone, M., **Michalaka, D.**, Moreno, A.T., and Parikh, K., (2015) “Comparison of Optimization Methods for Assisted Calibration of Traffic Micro-Simulation”. Transportation Research Board (TRB) of National Academies, Washington, D.C. *TRB 94th Annual Meeting Proceedings.*

- Mills, A., Holt, H., Rabb, R., and **Michalaka**, D. (2015). “An Effective Student Implemented STEM Outreach Program for Title 1 Schools”. *2015 ASEE Southeast Section Conference Proceedings*.
- Watson, M.K., Ghanat, S.T., Marley, K., and **Michalaka**, D. (2015). “Using Student Attitudes to Inform the Design of a First-Year Civil Engineering Course”. *2015 ASEE Southeast Section Conference Proceedings*.
- Hale, D.K., Antoniou, C., Brackstone, M., **Michalaka**, D., Moreno, A.T., and Parikh, K., (2014) “Comparison of Optimization Methods for Assisted Calibration of Traffic Micro-Simulation”. *OPT-i, An International Conference on Engineering and Applied Sciences Optimization Proceedings*.
- Michalaka**, D., and Yin, Y. (2013). “Managed Lanes Operations and Simulation using CORSIM”, 17th IRF World Meeting & Exhibition 2013, Riyadh, Saudi Arabia, *17th IRF World Meeting Proceedings*.
- Michalaka**, D., and Davis, W. (2013). “Transforming Transportation Engineering Education to better address Universal Mobility Challenges”, 17th IRF World Meeting & Exhibition 2013, Riyadh, Saudi Arabia, *17th IRF World Meeting Proceedings*.
- Michalaka**, D., Lu, J., and Yin, Y. (2012). “Fine-tuning Pricing Algorithms for High-Occupancy/Toll (HOT) Lanes”, TRB of National Academies, Washington, D.C. *TRB 91st Annual Meeting Proceedings*.

Research Reports

- Davis, W. J., Brown, K., Hughey, M., **Michalaka**, D., Bornstein, D., Hunyh, N., Kaczynski, A. Assessing Potential of Bike Share Networks and Active Transportation to Improve Urban Mobility, Physical Activity and Public Health Outcomes in South Carolina. Center for Connected Multimodal Mobility, October 2024.
- Michalaka**, D., Wells, O. STRIDE-K-12-Transportation Curriculum. STRIDE, June 2024.
- Watkins, K. E., Hughey, M., Davis, W. J., Brown, K., Amahrir, S., **Michalaka**, D., Bornstein, D. Evaluation of Transportation Network, Route Conditions, and Use Characteristics of Bike Share, Electric-Bike Share, and Electric-Scooter Share Systems. STRIDE, May 2024.
- Mohebbi, M., Sisiopiku, V., **Michalaka**, D., Davis, W. J. Promoting transportation Equity Through Curriculum Interventions. STRIDE, 2023.
- Chowdhury, M., Comert, G., **Michalaka**, D., Mwakalonge, J., Huynh, N., Biswas, P. K., Charles, F., Ahmed, F., Tine, J. M. A Cloud-based Quantum Artificial Intelligence-supported Truck Platooning Strategy for Safety and Operational Performance. Center for Connected Multimodal Mobility, 2023.
- Steiner, R., Hadi, M., Martin, J., Sisiopiku, V., **Michalaka**, D., Click, S., “Framework for the Development of a Diverse Transportation Workforce in the Southeast Region”, STRIDE, July 2022.
- Michalaka**, D., Agarwal, N., Brown, K., Hunter, M., Postma, D., Srinivasan, S., “Strategies for Mitigating Congestion in Small Urban and Rural Areas”, STRIDE, February 2022.
- Ogle, J., Islam, S., Brown, K., Mwakalonge, J., **Michalaka**, D., and Chowdhury, M. “Assessment of Safety Benefits of Technologies to Reduce Pedestrian Crossing Fatalities at Midblock Locations”, Center for Connected Multimodal Mobility, May 2020.
- Steiner, S.L., Washburn, S., Elefteriadou, L., Gan, A., Priyanka, A., **Michalaka**, D., Xu, R., Rachmat, S., and Cavaretta, A. “Roundabouts and Access Management”. Final Report to Florida Department of Transportation, FDOT Contract BDK77 977-22, January 2014.

- Michalaka, D.**, “Florida Minority Occupant Protection Task Force”. Draft Final Report to Florida Department of Transportation Safety Office, FDOT Contract AQS38, October 2013.
- Washburn, S., Letter, C., and Michalaka, D. “FDOT Central Data Warehouse Enhancements, Part 3”. Final Report to Florida Department of Transportation, FDOT Contract BDK-75-934-15, November 2012.
- Michalaka, D.**, Lu, J. and Yin, Y. “*Adjusted Time of Day Pricing vs. Near-Real Time Dynamic Pricing. Part C Dynamic Tolling Algorithms for Managed Toll Lanes*”. Final Report to Florida Department of Transportation, FDOT Contract BDK-77-977-04, November 2011.
- Michalaka, D.**, Hale, D., Simmerman, T., Yin, Y., and Washburn, S. “*Enhancing CORSIM for Simulating High Occupancy/ Toll Lane Operations*”. Final Report to the Center for Multimodal Solutions for Congestion Mitigation, University of Florida, Project Number 2010-015, December 2011.
- Elefteriadou, L., **Michalaka, D.**, Elias, A., Lu, C., and Fang, C. “*Validation and Enhancement of the Highway Capacity Manual’s Interchange Ramp Terminal Methodology*”. Final Report to the National Cooperative Highway Research Program Transportation Research Board of The National Academies, NCHRP 03-60A, December 2010.

GRANT PROPOSALS (since Jan. 2014)

“Generative AI and Augmented Reality/Mixed Reality for Enhanced College Engineering Student Experience”, (\$11,000)

Submitted April 2024, awarded May 2024

Submitted by: Dimitra Michalaka and Pooya Niksiar

“Center for Connected Multimodal Mobility (C²M²), Improving Mobility of People and Goods”, (~\$7,800,000 over 5 years)

Submitted May 2016, awarded November 2016

Submitted by: Clemson University (CU), Clemson, SC, 29634, University of South Carolina (USC), Columbia, SC, 29208, South Carolina State University (SCSU), Orangeburg, SC, 29117, The Citadel (Citadel), Charleston, SC, 29409, Benedict College (BC), Columbia, SC, 29204.

The proposed C²M² research will conduct research in the following areas 1) increased access to opportunities to promote equity in connecting regions and communities, including urban and rural communities; 2) smart cities; 3) innovations to improve multi-modal connections, system integration, and security; 4) assistive technologies for those with physical or cognitive disabilities; 5) data modeling and analytical tools to optimize passenger and freight movements; 6) innovations in multi-modal planning and modeling for high-growth regions; 7) non-traditional modes of transport and shared infrastructure use; and 8) regional planning and setting of transportation priorities. The center will be a pioneer not only in advancing technology but also in exploring the social, economic, political, and psychological contexts surrounding deployment of connected and automated vehicle technologies.

“Regional UTC (Region 4) on FAST Act Research Priority: Reducing Congestion” (~\$14,300,000 over 5 years), (Submitted May 2016, awarded November 2016)

*Submitted by: University of Florida, Gainesville, FL 32611 – Lead Institution
Auburn University, Auburn, AL 36849, The Citadel, Charleston, SC 29409, Florida International University (Minority Serving Institution), Miami, FL 33174, Georgia Institute of Technology, Atlanta, GA 30332, Jackson State University (Minority Serving Institution), Jackson, MS 39217, North Carolina State University, Raleigh, NC 27695, Tennessee*

Technological University, Cookeville, TN 38505, University of Alabama at Birmingham, Birmingham, AL 35294, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599.
This proposal is to establish a Regional University Transportation Center (UTC) within Federal Region 4 (Southeast) that will focus on Reducing Congestion. As the region continues to attract residents at a high rate (particularly retirees), and with longer commutes and significant tourism activity, congestion will continue to be at the forefront of local and state agencies' agendas.

“Mini-Roundabouts”, (\$2,950)

The Citadel Foundation, Faculty Research Grant (Submitted Feb. 2016, Awarded September 2016)

Principle Investigator: Dr. Dimitra Michalaka

This research focuses on mini-roundabouts, which are single-lane roundabouts with inscribed circular diameter between 50 and 90 ft. The purpose is to conduct a literature review on mini-roundabouts and identify locations where mini-roundabouts can be implemented in SC.

“A Study of Sign Life Expectancy”, (\$178,985)

South Carolina Department of Transportation (SCDOT), (Submitted Oct. 2015, not awarded)

Co-Principle Investigators: Dr. Wayne A. Sarasua, P.E. (lead) (Clemson), Dr. Mashrur (Ronnie) Chowdhury, P.E. (Clemson), Dr. Eric Huang (Clemson), Dr. William J. Davis, P.E. (The Citadel), Dr. Dimitra Michalaka (The Citadel)

The overall goal of this research is to identify the actual expected sign life based on retroreflectivity levels for different types of signs and other factors that may influence sign life including sheeting type, manufacturer, color, exposure to sunlight, humidity level and other environmental factors. The expected lifecycle of these signs should be presented in a manner and confidence level that could be included with a recommendation for SCDOT management to change the policy regarding sign replacement.

“Navigation of Pedestrians and Bicycles at Roundabouts”, (\$2,935)

The Citadel Foundation, Faculty Research Grant (Awarded June 2015)

Principle Investigator: Dr. Dimitra Michalaka

This research will focus on how pedestrians and bicyclists navigate through roundabouts, and how the movement of pedestrians and bicycles influence the capacity and throughput of vehicle traffic at roundabouts. The research will involve data collection at selected roundabouts in Charleston, SC area.

“Environmental Justice Analyses When Considering Toll Implementation or Rate Changes”, (\$500,000)

National Cooperative Highway Research Program (NCHRP 08-100) (Submitted Feb. 2014, not awarded)

Co-Principle Investigators: Dr. Yafeng Yin (lead) (University of Florida), Dr. David M. Levinson (University of Minnesota), Dr. Yinlai Wang (University of Washington), Dr. Dimitra Michalaka (The Citadel)

Tolling has become more prevalent as a funding mechanism as well as an operations strategy for transportation facilities. Tolling can have an impact on low-income and minority populations, but the extent of the impact is unclear. As a result of Presidential Executive Order 12898, U.S.DOT Order 5610.2(a), and Title VI of the Civil Rights Act of 1964, the U.S.DOT requires transportation agencies to take into consideration environmental justice (EJ) in all transportation programs, policies, and activities. However, there is little guidance on how to best incorporate EJ analysis in assessing equity concerns in the context of pricing. Further,

there is little consensus about what types of mitigation measures are appropriate to be used to offset the effects of tolling on minority and low-income populations. Research is needed to better understand how to measure and address the impact of tolling on minority and low-income populations as it relates to mobility, access, and household income. The objective of this research is to develop a toolbox that practitioners can use to evaluate and address environmental justice issues that arise when implementing tolls or rate changes. The toolbox will be used to assist transportation decision makers with how to assess and offset any potential impacts on minority and low-income populations as a result of tolling.

“Roundabouts and Access Management”, (\$3,000)

The Citadel Foundation, Faculty Research Grant (Awarded June 2014)

Principle Investigator: Dr. Dimitra Michalaka

The objective of this project is to conduct an operational analysis of selected roundabouts in Charleston, SC area. The operational analysis will examine how roundabouts perform relatively to other types of un-signalized intersections and how they can enhance access management located in their vicinity.

PRESENTATIONS

"Sustainable Cutting-Edge Transportation engineering at The Citadel through Research and Education," Sabbatical Informational Session, Sabbatical Committee, Zoom. (September 24, 2024).

"Research Activities at The Citadel - Safety & Health Mobility Options," *C²M² 8th Annual Fall Conference*, Columbia, SC, United States. (August 22, 2024).

"Safety and Health Impacts of Mobility Alternatives," 2024 International Conference on Transportation & Development, ASCE, Atlanta, GA, (June 17, 2024).

"Smart Cyber-Physical-Social-Systems (CPSS) to improve safety and mobility of people and goods," *2024 International Conference on Transportation & Development*, ASCE, Atlanta, GA, (June 17, 2024).

"Bridging the Gap: Advancing Transportation Equity in Urban Development Through Education," 2024 International Conference on Urban Affairs, New York, NY. (April 2024).

"Potential Reduction of Fatal Crashes in South Carolina due to Automated Vehicles," Southern District Institute of Transportation Engineers (SDITE), Wilmington, NC, (April 8, 2024).

"K-12 Transportation Curriculum Transportation Engineering & Design Activities," STRIDE Workshop Series, STRIDE, Zoom. (January 23, 2024).

"Smart CPSS to improve safety and mobility of people and goods," TUDelft, TPM Instruction Room D2, Delft, Netherlands. (October 10, 2023).

"Safety and Health Impacts of Mobility Alternatives," TUDelft Faculty Lunch Colloquium, TUDelft, Faculty of Technology Building, Room C1.060, Delft, Netherlands. (September 13, 2023).

"The Citadel C2M2 Activities," *7th C2M2 Annual Fall Conference*, USDOT, Zoom. (August 16, 2023)

“Evaluation of Transportation Network Infrastructure, Safety, and Travel Route Characteristics of Bike Share, Electric-Powered Pedal-Assist Bike Share, and Electric Scooter System Operation”, ATINER International Conference on Transportation, Athens, GREECE (May 29, 2023).

- "Strategies for Mitigating Congestion in Small Urban and Rural Areas," SDITE, Louisville, KY. (March 29, 2022).
- "Strategies for Mitigating Congestion in Small Urban and Rural Areas," 7th Annual UTC Conference for the Southeastern Region, USDOT, Florida Atlantic University, Boca Raton, FL. (March 25, 2022).
- "Hybrid Quantum-Classical Neural Network for Incident Detection," 7th Annual UTC Conference for the Southeastern Region, USDOT, Florida Atlantic University, Boca Raton, FL. (March 24, 2022).
- "The Citadel UTC Activities," 7th Annual UTC Conference for the Southeastern Region, USDOT, Florida Atlantic University, Boca Raton, FL. (March 24, 2022)
- "Successful Faculty Practices," Faculty Meeting Series, LeTellier Hall. (February 24, 2022).
- "Traffic Impacts due to COVID-19 in South Carolina, USA," ICTR2021 Conference, Virtual, Rhodes, Greece. (September 2, 2021).
- "Citadel Civil & Construction Engineering Student Information Session," The Citadel, Zoom. (June 21, 2021).
- "Assessing Potential of Bike Share Networks and Active Transportation to Improve Urban Mobility, Physical Activity and Public Health Outcomes," ATINER, Athens, Greece. (May 31, 2021).
- "Adapting K-12 Programs to a Virtual Environment during COVID-19," STRIDE, Zoom. (April 14, 2021).
- "Strategies for Mitigating Congestion in Small Urban and Rural Areas," SDITE, Virtual. (April 14, 2021).
- "Assessing Potential of Bike Share Networks & Active Transportation to Improve Urban Mobility, Physical Activity & Public Health Outcomes in SC," SDITE, Virtual. (April 13, 2021).
- "Student Perceptions on Variety of Class Types due to COVID-19," ASEE SE, Zoom. (March 10, 2021).
- "Introduction to Civil and Transportation Engineering," West Ashley High School Principles of Engineering Course, Zoom. (February 26, 2021).
- "The Future of Leadership," Center for Connected Multimodal Mobility (C2M2), Zoom. (January 29, 2021).
- "Civil Engineering, Career Opportunities and Engineering at The Citadel," The Cooper River Center for Advanced Studies Pre-Engineering Class, Zoom. (January 8, 2021).
- "What is leadership in today's society" C²M² Distinguished Speaker Series for the Future Leaders program, Virtual, (April 3, 2020)
- "Which Skills Are More Important in The Engineering World? Perceptions of College Students, Recent Graduates, and Employers". 2020 ASEE, Southeastern Section Meeting, Auburn, AL (March 2020)
- "Assessing Graduate Student Understanding of Leadership Compared to Management". 2020 ASEE, Southeastern Section Meeting, Auburn, AL (March 2020)
- "Adopting ASCE ExCEED Model for Engineering Education: Lessons Learned and Implementation Strategies". 2020 ASEE, Southeastern Section Meeting, Auburn, AL (March 2020)
- "Citadel Transportation and Mobility Research in SC and Beyond", ASCE SC Luncheon Meeting, Charleston, SC (Jan. 10, 2020)
- "The Citadel and Assessing Potential of Bike Share Networks and Active Transportation in South Carolina" 3rd Annual C²M² Fall Conference, Clemson, SC (Oct. 2019)
- "Student Perceptions of How Different Course Types May Influence Their Career". 2019 ASEE,

- Southeastern Section Conference*, Raleigh, NC (March 2019).
- “The Impact of an Emergency Bridge Lane Closure and Contraflow Lane Implementation on Travel in Charleston, SC”. *98th Annual Transportation Research Board*, Washington, DC, (Jan. 2019).
- “How transportation choices impact our Health and Wellness”, *2018 ITE Annual Meeting and Exhibit*, Minneapolis, MN, (August 2018).
- “Leadership ITE and its Impact on our Profession”, *2018 SDITE Annual Meeting*, Mobile, AL (April 2018).
- “Transportation Engineering at The Citadel”, *2018 SCITE Spring Meeting*, Charleston, SC, (April 2018).
- “Surveying Courses in Civil Engineering”. *2018 Society of Engineering Education (ASEE), Southeastern Section Conference*, Daytona Beach, Fl (April 2018).
- “Leadership at The Citadel”. *2017 C²M² Conference*, Clemson, SC (November 2017).
- “Student Perception of Teamwork Skills and Experiences across Prerequisite Courses in Transportation Engineering at The Citadel”. *2017 ASEE Zone II Conference*, San Juan, Puerto Rico (March 2017).
- “Study of Pre- and Post-Course Knowledge Surveys in an Engineering Economy Course”. *2017 ASEE Zone II Conference*, San Juan, Puerto Rico (March 2017).
- “Highlights from the Teaching-Professor Conference 2016: Tips, Tricks & Handouts”. *Citadel Academy for the Scholarship of Teaching, Learning & Evaluation (CASTLE)* session (and final CASTLE for 2016), Charleston, SC (November 2016).
- “Roundabouts as a Form of Access Management”. *Transportation Research Record: Journal of the Transportation Research Board, Transportation Research Board (TRB) 95th Annual Meeting*, Washington, DC (January 2016).
- “Managed Lane Operations” Sigma Xi seminar, The Citadel (November 2015).
- “Application of Active Learning Techniques in Undergraduate Civil Engineering Curriculum”. *122nd ASEE, Annual Conference and Exposition*, Seattle, WA, (June 2015).
- “Teaching and Assessing Professional Skills in an Undergraduate Civil Engineering Curriculum”. *122nd ASEE, Annual Conference and Exposition*, Seattle, WA (June 2015).
- “Operational Analysis at Roundabouts to Identify Access Management”, *Southern District Institute of Transportation Engineers Annual Meeting*, Biloxi, MS, (April 2015).
- “Comparison of Optimization Methods for Assisted Calibration of Traffic Micro-Simulation”. *TRB 94th Annual Meeting*, Washington, DC (January 2015).
- “Comparison of Optimization Methods for Assisted Calibration of Traffic Micro-Simulation”. *OPT-I, An International Conference on Engineering and Applied Sciences Optimization*, Kos Island, Greece, (June 2014).
- “Simulating High-Occupancy/Toll (HOT) Lane Operations”, *Southern District Institute of Transportation Engineers Annual Meeting*, Greensboro, GA, (March 2014).
- “Managed Lanes Operations and Simulation using CORSIM”, *17th IRF World Meeting & Exhibition 2013*, Riyadh, Saudi Arabia, (November 2013).
- “Transforming Transportation Engineering Education to better address Universal Mobility Challenges”, *17th IRF World Meeting & Exhibition 2013*, Riyadh, Saudi Arabia, (November 2013).
- “Florida Minority Occupant Protection Task Force”, *University Transportation Centers (UTC) Conference for the Southeastern Region*, Orlando, Fl (April 2013).
- “Enhancing CORSIM for simulating High Occupancy/ Toll Lanes Operations”, *CORSIM Workshop*, Orlando, Fl (August 2011).

- “Introducing Greek Culture”, *Multicultural Fair* at Shands Hospital, Gainesville, FL (August 2011).
- “Introducing Greek Culture”, *One world, many stories*, Levy County Public Libraries at Williston, A.F. Knotts, Bronson, Cedar Key, and Chiefland, FL (Summer 2011).
- “Enhancing CORSIM for Simulating High Occupancy/Toll Lanes Operations”, *CMS Annual Student Conference*, Gainesville, FL (March 2011).
- “Proactive and Robust Dynamic Pricing Strategies for High Occupancy/Toll (HOT) Lanes”, *Innovations in Pricing of Transportation Systems: Workshop and Conference*, Gainesville, FL (May 2010).

Poster Presentations

- "Framework for the Development of a Diverse Transportation Workforce in the Southeast Region," *2024 International Conference on Transportation & Development*, ASCE, Atlanta, GA, (June 16, 2024).
- "Potential Fatal Crash Reduction in South Carolina due to Different Levels of Automated Driving," *2024 International Conference on Transportation & Development*, American Society of Civil Engineers (ASCE), Atlanta, GA, (June 17, 2024).
- "Analysis of potential safety benefits resulting from different automation levels and penetration rates of automated vehicles: a case study in the Netherlands," *2024 Road Safety and Simulation Conference* organized by the Kentucky Transportation Center, Lexington, KY, (October 30, 2024).
- “Strategies for Mitigating Congestion in Small Urban and Rural Areas”, *6th Annual University Transportation Center (UTC) Conference for the Southeastern Region*, Clemson, SC (October 2018).
- “Access Management Aspects Influencing Roundabout Design and Operations”, *Transportation Research Board 93rd Annual Meeting*, Washington, DC (January 2014).
- “Deployment Strategies of Managed Lanes on Arterials”, *Transportation Research Board 93rd Annual Meeting*, Washington, DC (January 2014).
- “Managed Lanes Operations and Simulation using CORSIM”, *17th IRF World Meeting & Exhibition 2013*, Riyadh, Saudi Arabia, (November 2013).
- “Transforming Transportation Engineering Education to better address Universal Mobility Challenges”, *17th IRF World Meeting & Exhibition 2013*, Riyadh, Saudi Arabia, (November 2013).
- “Simulating High-Occupancy/Toll (HOT) Lane Operations”, *Transportation Research Board 92nd Annual Meeting*, Washington, DC (January 2013).
- “Fine-tuning Pricing Algorithms for High-Occupancy/Toll (HOT) Lanes”, *Transportation Research Board 92nd Annual Meeting*, Washington, DC (January 2013).
- “Pricing of Multi-segment High Occupancy/Toll (HOT) Lane Facilities”, *Transportation Research Board 91st Annual Meeting*, Washington, DC (January 2012).
- “Pricing of Multi-segment High Occupancy/Toll (HOT) Lane Facilities”, *District 10/ Florida Section ITE 2011 Annual Meeting*, St. Petersburg, FL. (December 2011).
- “Enhancing CORSIM for Simulating High-Occupancy-Vehicle and -Toll Lane Operations”, *Transportation Research Board 90th Annual Meeting*, Washington, DC (January 2011).
- “Proactive and Robust Dynamic Pricing Strategies for High-Occupancy-Toll Lanes”, *Transportation Research Board 90th Annual Meeting*, Washington, DC (January 2011).
- “Enhancing CORSIM for simulating High Occupancy/ Toll Lane Operations”, *TEAMFL meeting*, Miami, FL. (October 2010).

- “Proactive and Robust Pricing Strategies for High Occupancy/ Toll Lanes”, *Transportation Research Board 89th Annual Meeting*, Washington, DC (January 2010).
- “Proactive and Robust Pricing Strategies for High Occupancy/ Toll Lanes”, *CMS Annual Student Conference*, Gainesville, Fl. (March 2009).
- “Proactive and Robust Pricing Strategies for High Occupancy/ Toll Lanes”, *TRANSPO 2008*, Orlando, Fl. (September 2008).

WORKSHOPS/WEBINARS (since Jan. 2013)

Offered

- **Equity, Diversity, and Inclusion (EDI) Leadership Webinar: Techniques to Diversify & Support Transportation Workforce**
Target Audience: Transportation Workforce Professionals
Date: May 9, 2022
Location: Virtual
- **Adapting K-12 Programs to a Virtual Environment during COVID-19**
Target Audience: Educators
Date: April 14, 2021
Location: Virtual
- **Strategies for Mitigating Congestion in Small Urban and Rural Areas**
Target Audience: Transportation Professionals
Date: November 4, 2020
Location: Virtual
- **South Carolina (SC) Bike and Pedestrian Clearinghouse**
Target Audience: Transportation Professionals
Date: August 5, 2020
Location: Virtual
- **Connected Vehicles Workshop**
Target Audience: Transportation Professionals
Date: June 26th, 2018
Location: SCDOT District 3 Conference Room, Greenville, SC
- **Elementary Engineering (x2)**
Target Audience: Elementary School Teachers
Date: August 5th, 2014
Location: Bluffton High School, Bluffton, SC
Those workshops reviewed how the engineering design process can be incorporated into the elementary classroom and introduce teachers to engineering project resources. Teachers completed engineering activities and explored ways that they can incorporate engineering in their science and math classes.
- **Managed Lanes Operations and Simulation using CORSIM Workshop**
Target Audience: Transportation Engineering Professionals
Date: April 29th-30th, 2013
Location: Online and University of Florida, Gainesville, Fl
This 2-part workshop included a 1.5 hour webinar/lecture on Monday, April 29 (2 PDH credits offered) followed by a 4 hour hands-on computer lab on Tuesday, April 30 (4 PDH credits offered) on managed lanes operations and simulation using CORSIM.

Attended

- **Integrating Curriculum with Entrepreneurial Mindset (ICE) workshop**
Date: May 19 to May 22, 2025
Virtually
- **2018 ExCEED Workshop as assistant mentor**
Date: June 2nd-8th, 2018
Location: University of Nebraska, Omaha, NE
Assistant mentor at a six-day practicum that provides engineering educators with an opportunity to improve their teaching abilities.
- **2017 NCAT Asphalt Training**
Date: June 19 to June 23, 2017
Location: NCAT facility, Auburn, AL
The NCAT Professor Training Course is a five-day course that includes intensive lectures, laboratory exercises, and discussions to understand all basic phases of asphalt technology for undergraduate instruction.
- **2015 ExCEED Workshop**
Date: June 21th-26th, 2015
Location: Florida Gulf Coast University, Skokie, IL
The ExCEED Teaching Workshop is a six-day practicum that provides engineering educators with an opportunity to improve their teaching abilities. ASCE has successfully presented this workshop each summer for the past sixteen years. Faculty members across the country and around the world have benefited from this workshop.
- **2014 Portland Cement Association (PCA) Professors' Workshop.**
Date: July 21th-25th, 2014
Location: PCA Campus, Skokie, IL
The Professors' Workshop is designed to provide faculty in engineering, architecture, and construction management programs the tools to teach the latest developments in concrete design, construction, materials, pavements, and sustainability.
The week-long event also included networking opportunities to facilitate exchanging ideas with professors from many universities.
- **2014 ASEE Annual K-12 Workshop.**
Date: June 14th, 2014
Location: Convention Center, Indianapolis, IN
This daylong program for teachers and engineering educators from across the country provided an energizing, interactive overview of successful engineering education instruction for the K-12 classroom. Attendees learned engaging hands-on lessons and interactive activities to share with students, received takeaway materials ready for use in the classroom, and had opportunities to network with other engineering educators.
- **Excellence in Civil Engineering Education (ExCEED) Mini-Workshop**
Date: Jan. 10th-11th, 2014
Location: The Citadel, Charleston, SC
Two-day workshop to discuss strategies for effective instruction, including consideration of diverse learning styles, use of board notes, and outline of learning objectives.

PROFESSIONAL SERVICE/ LEADERSHIP

Paper Review

- ASEE Southeastern Conference, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026
- ASEE Annual Conference and Exposition, 2015, 2016, 2017, 2020, 2021, 2024, 2025
- Terrell Paper Competition, ASCE Region 4, 2016, 2017, 2019, 2020
- IEEE Transactions on Intelligent Transportation Systems, 2016
- 19th IEEE Intelligent Transportation Systems Conference, 2016
- Transportation Research Part C, 2013, 2014
- Transportation Research Board 92nd Annual Meeting, 2013
- Transportation Research Board 91st Annual Meeting, 2012
- 14th International IEEE Annual Conference on Intelligent Transportation Systems, 2011
- World Conference on Transport Research (WCTR), 2010

University governance and service

Committee member (August 2025 to present)

Sabbaticals Committee, The Citadel.

Committee member (Spring 2018 to 2022)

Undergraduate Curriculum Committee, The Citadel.

Member (Fall 2020 to present)

Faculty Senate, The Citadel

Committee member (Spring 2014 to present)

Civil and Environmental Engineering (CEE), Development of a Graduate Certificate Program on “Sustainable Public Infrastructure”, The Citadel.

Committee member (Spring 2017 to Summer 2020)

Facilities and Services, The Citadel.

Committee member (Spring 2014 to Summer 2018)

Civil and Environmental Engineering (CEE) Awards, Scholarships and Advancement (ASA), The Citadel.

Committee chair and member (Fall 2017 (member), Fall 2018 (chair), Fall 2019 (chair), Fall 2020 (chair))

Student of the Year Selection Committee, STRIDE.

Faculty Fellow in Service Learning and civil engagement (Summer II, 2014)

The Citadel.

Committee member (Spring 2014)

School of Engineering, Mechanical Engineering Department Faculty Search, The Citadel.

Committee member (Spring 2011 to Summer 2012)

Civil and Coastal Engineering (CCE) Graduate Student Advisory Group, University of Florida.

Committee member (Fall 2011)

Doctoral Dissertation Advisor/Mentor Awards Committee, University of Florida.

Appointments

Co-chair (2023 to present)

Workforce Development Committee, Southern District of Institute of Transportation Engineers (SDITE)

Committee Member (2024 to present)

Workforce Development Council, American Society of Civil Engineers (ASCE)
Associate Director, C²M² (2017-2024)
SC ITE Section Representative (2019-2023)
South Carolina Section Institute of Transportation Engineers (ITE)
Chair (2022)
Engineering Design Graphics, Southeast Section, ASEE.
Chair (2017-2021)
Road Safety Intersection and Roundabout Subcommittee, International Road Federation (IRF)
Chair (2020)
Engineering Technology Division, Southeast Section, American Society for Engineering Education (ASEE).
Vice-chair (2020)
Engineering Design Graphics Division, Southeast Section, ASEE.
Leadership ITE 2020, 2021 Class Selection Committee Member (Fall 2019, Fall 2020)
ITE
Chair (2019, 2017)
Civil Engineering Division, Southeast Section, ASEE.
Vice-chair (2019)
Professional Skills Division, Southeast Section, ASEE.
Secretary (2019)
Engineering Design Graphics Division, Southeast Section, ASEE.
Secretary (2018)
Professional Skills Division, Southeast Section, ASEE.
Committee Member (since 2018) Leadership Curriculum Development Committee, ITE
Chair (2018)
Engineering Design Graphics Division, Southeast Section, ASEE.
Secretary (2018, 2016)
Civil Engineering Division, Southeast Section, ASEE.
Faculty Advisor (Fall 2017 to present)
Institute of Transportation Engineers (ITE), The Citadel, Student Chapter
Faculty Advisor (Fall 2014 to Spring 2020)
Society of Women Engineers (SWE), The Citadel, Student Chapter
Faculty Advisor (since Fall 2017)
Hurling Club, The Citadel, Student Chapter
Faculty Advisor (Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2019)
ASCE Conference Transportation Competition, The Citadel, Student Chapter
Faculty Co-Advisor (Spring 2014)
Society of Women Engineers (SWE), The Citadel, Student Chapter
Faculty Advisor (Fall 2012 to December 2013)
Women's Transportation Seminar (WTS), University of Florida, Student Chapter
Fundamentals of Engineering Exam Review Coordinator/ Member Coordinator (Fall 2012)
Tau Beta Pi Engineering Honorary Society – Florida Alpha Chapter, University of Florida
President (Spring 2011 to Summer 2012)
WTS, University of Florida, Student Chapter
Treasurer (Summer 2010 to Fall 2010)
WTS, University of Florida, Student Chapter
Social Secretary (Fall 2007 to Spring 2009, Summer 2011 to Spring 2012)

Institute of Transportation Engineers (ITE), University of Florida, Student Chapter

Conference/ Event Organizing

Organizing Chair

- Society of Women Engineers (SWE) student chapter participation at Military Appreciation Night at Volvo Car Open Tennis Tournament, Daniel Island, SC (April 2019)
- Women Self-Defense Seminar, The Citadel, Charleston, SC (March 2019)
- Engineering Career Fair Prep Workshop, The Citadel, Charleston, SC (October 2018)
- Connected Vehicles Workshop, SCDOT District 3 Conference Room, Greenville, SC (June 2018)
- Introduce a Girl to Engineering Day, The Citadel, Charleston, SC (February 2015, February 2016, February 2017, February 2018, February 2019)
- Bicycle Helmet Fitting Course, UF, Gainesville, FL (November 2012, March 2013)
- UF WTS 2nd Annual Transportation Symposium, Gainesville, FL (November 2012)
- Engineering GatorTRAX, UF, Gainesville, FL (February 2012)
- UF WTS Transportation Symposium, Gainesville, FL (October 2011)
- Resume Development and Interview Preparation Workshop, Gainesville, FL (April 2011)

Organizing Committee Member

- Women in Industry Day, The Citadel, Charleston, SC (March 8, 2019)
- Introduce a Girl to Engineering Day, The Citadel, Charleston, SC (February 2014)
- Family Engineering Night, Williams Elementary School, Gainesville, FL (April 2012)
- Family Engineering Night, Lawton Chiles Elementary School, Gainesville, FL (February 2012)
- CORSIM Workshop, Orlando, FL (August 2011)
- 2010 Highway Capacity Manual Workshop, Orlando, FL (August 2010)
- Innovations in Pricing of Transportation Systems: Workshop and Conference, Orlando, FL (May 2010)
- Congestion Mitigation Strategies Symposium/ TRC Alumni & Friends Lunch, Gainesville, FL (November 2009)
- UF/ TRC Workshop on Roundabouts, Orlando, FL (August 2009)

Volunteering

- Metanoia STEM program, Mary Ford Elementary School, North Charleston, SC (July 2014)
- STEM Activities at Little Bulldogs program, Burke Middle School, Charleston, SC (July 2014)
- Citadel Student Research Conference (CSRC) poster judge, Daniel Library, The Citadel, Charleston, SC (March 2014)
- Charleston STEM Festival, The Citadel College of Engineering Booth, Liberty Square, Charleston, SC (February 2014)
- Careening Roller Coasters, Cade Museum for Creativity and Invention, Gainesville, FL (March 2013)
- Engineering Fair, University of Florida, Gainesville, FL (February 2013)
- Tau Beta Pi new member initiation, UF, Gainesville, FL (November 2012)
- Learn History, Howard Bishop Middle School, Gainesville, FL (November 2012)
- Engineering GatorTRAX, UF, Gainesville FL (September 2012)
- City of Gainesville, Traffic Management Center, Gainesville, FL (Fall 2012)
- “Dream Big Read”, International Student Speakers’ Bureau, Public Libraries, Levy County (Summer 2012)
- Family Engineering Night, Williams Elementary School, Gainesville, FL (April 2012)

- SECME, University of Florida, Gainesville, FL (March 2012)
- Engineering GatorTRAX, University of Florida, Gainesville, FL (March 2012)
- Afterschool program, Lawton Chiles Elementary School, Gainesville, FL (March 2012)
- Engineering Fair, University of Florida, Gainesville, FL (February 2012)
- Family Engineering Night, Lawton Chiles Elementary School, Gainesville, FL (February 2012)
- 2012 Alachua Region Science and Engineering Fair, Gainesville, FL (February 2012)
- Science Fair, Lincoln Middle School, Gainesville, FL (December 2011)
- Science Fair, Oak View Middle School, Newberry, FL (November 2011)
- Soup Kitchen/ St. Francis House, Gainesville, FL (November 2011)
- 18th ITS World Congress, Orlando, FL (October 2011)
- “One world, many stories”, International Student Speakers’ Bureau, Public Libraries, Levy County (Summer 2011)

Other affiliations

Member

- American Society of Civil Engineers (ASCE) (since 2015)
- Society of Women Engineers (SWE) (since 2014)
- South Carolina Institute of Transportation Engineers (since 2014)
- Tau Beta Pi (since 2012)
- Transportation Research Board (since 2007)
- Congestion Pricing Outreach Committee (since 2012)
- Technical Chamber of Greece – Registered Civil Engineer (since 2007)

Friend

- Congestion Pricing Committee (ABE25), Transportation Research Board
- Committee on Highway Capacity and Quality of Service (AHB 40), Transportation Research Board
- Traffic Simulation Models Subcommittee (AHB45), Transportation Research Board
- Committee on Roundabouts (ANB75), Transportation Research Board

Speaker

- International Student Speakers’ Bureau (ISSB) (2011-2013).
- Gator Global Educators (GaGE) (2012-2013).