# Alexandra Kondyli, Ph.D.
## Thomas E. Mulinazzi Chair's Council Associate Professor


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## EDUCATION

Ph.D., 2009 Civil & Coastal Engineering, University of Florida, Gainesville, Florida.
M.S., 2005 Civil & Coastal Engineering, University of Florida, Gainesville, Florida.
Diploma, 2003 Rural and Surveying Engineering, (five-year program) National Technical University of Athens, Athens, Greece.

## EMPLOYMENT

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| 8/2023 – present | **Associate Director**, Mid-America Transportation Center, MATC |
| 8/2023 – present | **Associate Director for MATC**, KU Transportation Center, University of Kansas, Lawrence, Kansas |
| 8/2023 – present | **Thomas E. Mulinazzi Chair's Council Associate Professor**, University of Kansas, Lawrence, Kansas |
| 8/2020 – present | **Associate Professor**, University of Kansas, Lawrence, Kansas. |
| 8/2014 – 8/2020 | **Assistant Professor,** University of Kansas, Lawrence, Kansas. |
| 8/2019 – 8/2020 | **Chair's Council Assistant Professor**, University of Kansas, Lawrence, Kansas. |
| 11/2012 – 8/2014 | **Postdoctoral Associate,** University of Florida, Gainesville, Florida. |
| 1/2011 – 1/2013 | **Transportation Researcher**, National Technical University of Athens, Athens, Greece. |
| 8/2009 – 11/2012 | **Transportation Engineering Consultant,** collaboration with ANKA Consulting, Athens, Greece. |

## HONORS & AWARDS

1. **Thomas E. Mulinazzi Chair's Council Associate Professor,** Department of Civil, Environmental, and Architectural Engineering, University of Kansas, 2023-2026.
2. **Greek Diaspora Fellow**, "Collaborative Research and Mentoring in Driver Behavior and Traffic Safety", Host: Prof. George Yannis, National Technical University of Athens, Greece, June-July 2022.
3. **Panel Fellow,** Game Changer Academies for Advancing Research Innovation of the NSF Division of Civil, Mechanical and Manufacturing Innovation (CMMI), 2022.
4. **Chair's Council Assistant Professor,** Department of Civil, Environmental, and Architectural Engineering, University of Kansas, 2019-2020.
5. **ASCE ExCEED Teaching Fellow**, 2015.
6. **Best Practices Institute Fellow,** University of Kansas Center for Teaching Excellence, 2015.

7. **Best Paper Award Finalist** for the paper "A 3D Experimental Framework for Exploring Drivers' Body Activity Using Infrared Depth Sensors" during the 2nd International Conference on Connected Vehicles & Expo (ICCVE 2013), Las Vegas, NV, 2013.
8. **Best Student Poster Award** for the poster "Driver Behavior at Freeway-Ramp Merging Areas: Focus Group Findings" during the ITS-TRANSPO Conference, Orlando, Florida, 2008.
9. **Outstanding Student Award,** University of Florida International Center, 2006.

## RESEARCH ACTIVITY

1. **PI** on project "Impact of Double Centerline Rumble Strips (CLRS) on Driver Behavior". Project funded through Kansas DOT (2024-2025). Project budget: $85,000.
2. **PI** on project "SMART Grant – Operation Green Light – Arterial Traffic Signal Performance Metrics Project Support." Project funded through the Mid-America Regional Council and US Department of Transportation SMART Grant program (2023-2024). Project budget: $75,000.
3. **PI** on project "NCHRP Synthesis Topic 55-20: Traffic Capacity Level of Service Adaptations and Usage". Project funded through the National Cooperative Highway Research Program (NCHRP) (2023-2024). Project budget: $55,000.
4. **PI** on project "Mid-America Transportation Center for Transportation Safety and Equity (MATC-TSE)" Project funded through USDOT University Transportation Centers. Project budget: $3,000,000 per year for 5 years ($15,000,000 total). KU portion: $450,000 for Year 1 (2023-2024); $440,166 per year for years 2-5 (2024-2027); $2,210,664 total. PI: Aemal Khattak, University of Nebraska. PI on MATC-TSE Year 1 sub-project "Investigation of Key Safety Measures for Pre and Post-Deployment of Connected and Automated Vehicles" (2023-2024). Project budget: $153,169.
5. **PI** on project "Investigation of Driver Adaptations in a Mixed Traffic Environment". Project funded through MATC/US DOT (2022-2024). Project budget: $175,183.
6. **PI** on project "Creating Effective Graphic Changeable DMS Messaging". Project funded through Kansas DOT (2023-2024). Project budget: $85,000.
7. **PI** on project "Understanding the Effects of Truck Platooning on Workforce in Kansas". Project funded through Kansas DOT (2022-2023). Project budget: $55,000.
8. **Co-PI** on project "Evaluation of Rural Roundabouts". Project funded through Kansas DOT (2022-2023). Project budget: $62,500. PI: Steven Schrock, University of Kansas.
9. **PI** on project "SCC-CIVIC-FA Track A: Connecting underrepresented youths with employment opportunities". Project funded through NSF Smart & Connected Communities CIVIC Challenge (2021-2023). Project budget: $1,199,999.
10. **Co-PI** on project "A Study of Mitigating Concentrated Sheet Flow of Water at Ends of Super-elevated Curves". Project funded through Kansas DOT (2021-2023). Project budget: $78,646. PI: Joshua Roundy, University of Kansas.
11. **Co-PI** on project "Providing Crash Data Analysis Services for the Kansas Department of Transportation". Project funded through Kansas DOT (2021-2023). Project budget: $250,000. PI: Steven Schrock, PhD, University of Kansas
12. **PI** on project "Optimizing Highly Automated Vehicle Systems for People with Cognitive Disabilities". Project funded through US DOT (2021-2023). Project budget: $300,000.

13. **PI** on project “SCC-CIVIC-PG Track A: Connecting underrepresented youths with employment opportunities”. Project funded through NSF Smart & Connected Communities CIVIC Challenge (2021). Project budget: $50,000.
14. **PI** on project “Design and Evaluation of Temporary Signs at Uncontrolled Intersections”. Project funded through the City of Topeka (2021-2022). Project budget: $41,997.
15. **Co-PI** on project “WyCo Works”. Project funded through Wyandotte County (2020). Project budget: $45,000. PI: Andrew Davidson, University of Kansas.
16. **PI** on project “NCHRP 15-66: Operational Performance and Safety Effects of Arterial Weaving Sections”. Project funded through the National Cooperative Highway Research Program (NCHRP) (2020 – 2023). Project budget: $750,000. KU portion: $100,000. PI: Lily Elefteriadou, University of Florida.
17. **PI** on project “Evaluation of Near-Miss Crashes Using a Video-Based Tool”. Project funded through Kansas DOT (2020-2022). Project budget: $71,500.
18. **PI** on project “Modeling Driver Aggressiveness and its Impact on Safety Using Biobehavioral Methods – Phase III”. Project funded through MATC/US DOT (2019-2022). Project budget: $86,542.
19. **Co-PI** on project “Benchmarks for Teaching Effectiveness”. Project funded through the University of Kansas Center for Teaching Excellence (2019-2020). Project budget: $5,000. PI: Robert Parsons, PhD, University of Kansas.
20. **Co-PI** on project “Providing Crash Data Analysis Services for the Kansas Department of Transportation”. Project funded through Kansas DOT (2019-2021). Project budget: $98,032. PI: Steven Schrock, PhD, University of Kansas.
21. **PI** on project “Calibration of a Driver Behavior Framework for Automated and Manually Driven Vehicles”. Project funded through the University of Kansas Center for Research, General Research Fund (2019-2020). Project budget: $9,995.
22. **PI** on project “Enhancing Course Transformation for CE 480 – Intro to Transportation Engineering”. Project funded through the University of Kansas Center for Teaching Excellence and the TRESTLE Course Transformation Grant (2018-2019). Project budget: $1,500.
23. **PI** on project “Modeling Driver Aggressiveness and its Impact on Safety Using Biobehavioral Methods – Phase II”. Project funded through MATC/US DOT (2018-2019). Project budget: $84,128.
24. **PI** on project “Effectiveness of Entertaining Non-Traffic Related Messages on Dynamic Message Signs”. Project funded through Kansas DOT (2018-2020). Project budget: $94,800.
25. **PI** on project “Alternative Designs to Alleviate Freeway Bottlenecks at Merge/Diverge and Weaving Areas”. Project funded through FHWA Saxton Lab (2017-2019). Project budget: $300,000. KU portion: $30,000. PI: David Hale, PhD, Leidos.
26. **PI** on project “Promoting the Transportation Systems Management & Operations Program in Kansas”. Project funded through Kansas DOT (2017-2019). Project budget: $71,500.
27. **PI** on project “Modeling Driver Aggressiveness and its Impact on Safety Using Biobehavioral Methods – Phase I”. Project funded through MATC/US DOT (2017-2018). Project budget: $84,128.

28. **Co-PI** on project “2016 Work Zone and Guardrail Safety Training Grant”. Project funded through FHWA (2017-2022). Project budget: $1,500,000. KU co-PI/ KU portion: $187,500. PI: Peter Savolainen, PhD, Iowa State University.
29. **Co-PI** on project “Providing Crash Data Analysis Services for the Kansas Department of Transportation”. Project funded through Kansas DOT (2017-2018). Project budget: $107,617. PI: Steven Schrock, PhD, University of Kansas.
30. **PI** on project “Narrowing Freeway Lanes and Shoulders to Create Additional Travel Lanes”. Project funded through FHWA Saxton Lab (2016-2018). Project budget: $400,000. KU portion: $39,200. PI: David Hale, PhD, Leidos.
31. **Co-PI** on project “Exploring the Factors Influencing Property Value Changes and Neighborhood Health in Johnson County, Kansas”. Project funded through Johnson County, Kansas (2016-2017). Project budget: $39,746. PI: Ting Lei, PhD, University of Kansas.
32. **PI** on project “Driver Body Posture Modeling in a Driving Simulator Environment”. Project funded through the New Faculty General Research Fund, the University of Kansas (2016-2017). Project budget: $8,000.
33. **PI** on project “Improving the Accuracy and Applicability of Kansas Traffic Data”. Project funded through Kansas DOT (2016-2018). Project budget: $60,000.
34. **PI** on project “Evaluation of Ramp Metering Effectiveness Along the I-35 Corridor in the Kansas City Metropolitan Area”. Project funded through Kansas DOT (2015-2023). Project budget: $59,983.
35. **Co-PI** on project “Investigating the Effect of Drivers’ Body Motion on Traffic Safety”. Project funded through the STRIDE (Southeastern Transportation Research, Innovation, Development & Education) Center (2013-2015). Project budget: $132,973. PI: Angelos Barmpoutis, PhD, University of Florida.
36. **Project manager** for the FDOT funded project “Comparison of Methods for Measuring Travel Time at Florida Freeways and Arterials” (2013-2014). PI: Lily Elefteriadou, PhD, University of Florida.
37. **Project manager** for the FDOT funded project “Estimation of Capacities on Florida Freeways” (2013-2014). PI: Lily Elefteriadou, PhD, University of Florida.
38. **Project participant** in the project “Investigation of Performance Characteristics of On-line Calibration Algorithms for Dynamic Traffic Assignment of Large Scale Networks” (January 2011 – January 2013). PI: Constantinos Antoniou, PhD, National Technical University of Athens.
39. **Project manager** of the NCHRP 3-87 “Proactive Ramp Management Under the Threat of Freeway Flow Breakdown” (2006-2009). PI: Lily Elefteriadou, PhD, University of Florida.
40. **Project participant** in the project funded by Southeastern Transportation, Research, Innovation, Development and Education Center (STRIDE) “Investigation of ATDM Strategies to Reduce the Probability of Breakdown” (2012-2014). PI: Mohammed Hadi, PhD, Florida International University, co-P.I. Lily Elefteriadou, PhD, University of Florida.
41. **Project participant** in the project funded by FDOT “Lifting High-Occupancy-Vehicle Lane Eligibility and Shoulder Use Restrictions for Traffic Incident Management” (2013-2014). PI: Yafeng Yin, PhD, University of Florida.

42. **Project participant** in the FDOT-funded project "Impact of Trucks on Arterial LOS and Freeway Work Zone Capacity". PIs: Lily Elefteriadou, PhD/Scott Washburn, PhD, University of Florida.
43. **Project participant** in the FDOT-funded project: "Development of Guidelines for Driveway Location and Median Configuration in the Vicinity of Interchanges" (2004-2005). PI: Scott Washburn, PhD, University of Florida.
44. **Project participant** in developing the NCHRP 3-60 Final Report: "Capacity and Quality of Service of Interchange Ramp Terminals" (2001-2004). PI: Lily Elefteriadou, PhD, University of Florida.

## RESEARCH PROPOSALS UNDER REVIEW

1. KDOT. Improve Wet Weather Visibility of Retroreflective Pavement Markings. Schrock, S. (PI), **Kondyli, A.** (co-PI). $91,500. June 2024.
2. NIOSH National Construction Center. Ko, C-H, (PI), **Kondyli, A.** (co-PI), Lines, B. (co-PI), Pasik-Duncan, B. (co-PI), Shomaji, S. (co-PI), Huynh, N. (co-PI). $18,119,636. December 2023.

## JOURNAL PUBLICATIONS (peer-reviewed)

1. Masud*, S.S.B., K. Mahajan, **A. Kondyli**, D. Deliali, G. Yannis, "Leveraging Machine Learning Algorithms to Predict and Analyze Single-Vehicle and Multi-Vehicle Crash Occurrences on Motorways". In *Transportation Research Record: Journal of the Transportation Research Board,* June 2024. (10.1177/03611981241250348)
2. Khan*, I.R., V. C. Kummetha*, K. Mahajan, S.D. Schrock, **A. Kondyli.** "Effectiveness of Behavioral Traffic Safety Messages Displayed on Dynamic Message Signs". In *Transportation Letters: The International Journal of Transportation Research*, special issue on *'Driver Behavior and Road Safety: Technological Advances in Combatting Human Errors and Behavioral Alarms',* January 2024. (10.1080/19427867.2024.2313291)
3. Mahajan, K., S.S.B. Masud*, **A. Kondyli**. "Navigating the Landscape of Automated Truck Platooning: A Systematic Review on Stakeholder Perspectives, Employment Implications, and Regulatory Challenges". In *Transportation Research Interdisciplinary Perspectives*, Vol. 23, January 2024. (https://doi.org/10.1016/j.trip.2023.101009)
4. Ahmadnezhad, P., J. M. Burns, A. E. Akinwuntan, M. Ranchet, **A. Kondyli**, J. Mahnken, H. Devos. "Driving Automation for Older Adults with Preclinical Alzheimer's Disease". In *Gerontology Journal*, August 2023. (https://doi.org/10.1159/000531263)
5. Kummetha*, V.C., U. Durrani, J. Mason, S. Concas, and **A. Kondyli**. "Driver Classification Using Self-reported, Psychophysiological, and Performance Metrics within a Simulated Environment". In *Data Science for Transportation*, 5(6), 2023. (https://doi.org/10.1007/s42421-023-00069-8)
6. Kummetha, V.C.*, **A. Kondyli**, "A Simulator-based Framework to Incorporate Driving Heterogeneity via a Biobehavioral Extension to the Intelligent Driver Model (IDM)". *Transportation Research Record, Journal of the Transportation Research Board*, 2022. (https://doi.org/10.1177/03611981221134630)
7. Eskandar, M., W. C.W. Giang, S. Motamedi, H. Devos, L. Koon, A. E Akinwuntan, **A. Kondyli**, "Designing a Reminders System in Highly Automated Vehicles' Interfaces for Individuals

with Mild Cognitive Impairment". *Frontiers in Future Transportation – Connected Mobility and Automation*, June 2022. (https://doi.org/10.3389/ffutr.2022.854553)

8. Kummetha, V.C.*, **A. Kondyli**, H. Devos, "Evaluating Driver Comprehension of the Roadway Environment to Retain Accountability of Safety During Driving Automation". *Transportation Research Part F*, 81, August 2021, pp. 457-471. (https://doi.org/10.1016/j.trf.2021.07.007)
9. Hale, D., G. Chrysikopoulos*, **A. Kondyli**, A. Ghiasi, "Evaluation of Data-Driven Performance Measures for Comparing and Ranking Traffic Bottlenecks". *IET Intelligent Transport Systems.* February 2021. (https://doi.org/10.1049/itr2.12040)
10. Alsharari, A.*, M. Asgharzadeh*, **A. Kondyli**, "Estimation of the Effect of Rain and Incidents on Freeway Capacity and Free-Flow Speed". *Transportation Research Record, Journal of the Transportation Research Board*, April 2020. (https://doi.org/10.1177/0361198120926500)
11. Kummetha, V.C.*, **A. Kondyli**, E. Chrysikou, S. D. Schrock, "Safety Analysis of Work Zone Complexity with Respect to Driver Characteristics – A Simulator Study Employing Performance and Gaze Measures". *Accident Analysis & Prevention*, 142, 2020. (https://doi.org/10.1016/j.aap.2020.105566)

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12. Asgharzadeh, M.*, **A. Kondyli**, "Effect of Geometry and Control on the Probability of Breakdown and Capacity at Freeway Merges". *ASCE - Journal of Transportation Engineering Part A*, 146(7), 2020. (https://doi.org/10.1061/JTEPBS.0000381)
13. Kummetha, V.C.*, **A. Kondyli**, S.D. Schrock, "Analysis of the Effects of Adaptive Cruise Control on Driver Behavior and Awareness Using a Driving Simulator." *Journal of Transportation Safety and Security*, Vol. 12(5), 2020. (10.1080/19439962.2018.1518359)
14. Asgharzadeh, M.*, P. Gubbala*, **A. Kondyli**, S.D. Schrock, "Effect of On-Ramp Demand and Flow Distribution on Capacity at Merge Bottleneck Locations". *Transportation Letters: The International Journal of Transportation Research*, September 2019. (10.1080/19427867.2019.1665774)
15. **Kondyli, A.**, D. Hale, M. Asgharzadeh*, B. Schroeder, A. Jia, J. Bared, "Evaluating the Operational Effect of Narrow Lanes and Shoulders for the Highway Capacity Manual". *Transportation Research Record: Journal of the Transportation Research Board,* Vol. 2673 (10), 2019, pp. 558-570. (https://doi.org/10.1177/0361198119849064)
16. Shehada, M.*, **A. Kondyli**, "Evaluation of Ramp Metering Impacts on Travel Time Reliability and Traffic Operations through Simulation". *Journal of Advanced Transportation*, Vol. 2019, Article ID 8740158, 12 pages, 2019. (https://doi.org/10.1155/2019/8740158)
17. Asgharzadeh, M.*, **A. Kondyli**, "Comparison of Highway Capacity Estimation Methods" *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2672(15), 2018, pp. 75-84. (10.1177/0361198118777602)
18. **Kondyli, A.,** A. Barmpoutis, V. P. Sisiopiku, L. Zhang, L. Zhao, M. M. Islam, S. S. Patil*, S. Rostami Hosuri, "A 3D Body Posture Analysis Framework During Merging and Lane Changing Maneuvers" *Journal of Transportation Safety and Security*, 10(5), pp. 411-428, 2018. (10.1080/19439962.2017.1294226)
19. **Kondyli, A.**, B. St. George, L. Elefteriadou, G. Bonyani, "Defining, Measuring, and Modeling Capacity for the Highway Capacity Manual" ASCE *Journal of Transportation Engineering, Part A: Systems*, Vol 143(3), March 2017. (10.1061/JTEPBS.0000017)

20. Zhang, Y., D.J. Sun, **A. Kondyli**, "An Empirical Framework for Intersection Optimization Based on Uniform Design" *Journal of Advanced Transportation*, Vol. 2017, Article ID 7396250, 10 pages, 2017. (10.1155/2017/7396250)
21. Sajjadi, S., **A. Kondyli, "**Macroscopic and Microscopic Analysis of Managed Lanes on Freeway Facilities in South Florida" *Journal of Traffic and Transportation Engineering (English Edition)*, Vol 4(1), pp. 61-70, January 2017. (10.1016/j.jtte.2016.12.002)
22. **Kondyli, A.**, B. St. George, L. Elefteriadou, "Comparison of Travel Time Measurement Methods Along Freeway and Arterial Facilities" *Transportation Letters: The International Journal of Transportation Research*, October 2016 (10.1080/19427867.2016.1245259)
23. Hale, D., J. Ma, **A. Kondyli**, J. Hu, Z. Huang, P. Su, "Right-Turn-On-Red Flow Profile Impacts on Urban Street Capacity Analysis" *Transportation Research Record: Journal of the Transportation Research Board* Vol. 2553, Transportation Research Board of the National Academies, Washington, DC, 2016 (10.3141/2553-04)
24. **Kondyli, A.**, V. Sisiopiku, A. Barmpoutis, "Computer Assisted Analysis of Drivers' Body Activity Using a Range Camera" *IEEE Intelligent Transportation Systems Magazine*, 7(3), pp. 18-28, July 2015. (10.1109/MITS.2015.2439179)
25. Hill, C., L. Elefteriadou, **A. Kondyli**, "Exploratory Analysis of Lane Changing Behavior on Freeways based on Driver Behavior" *ASCE Journal of Transportation Engineering*, 141(4), 2015. (10.1061/(ASCE)TE.1943-5436.0000758)
26. Li, Z., L. Elefteriadou, **A. Kondyli**. "Quantifying Weather Impacts on Traffic Operations for Implementation into a Travel Time Reliability Model" *Transportation Letters: The International Journal of Transportation Research*, December 2014. (10.1179/1942787514Y.0000000050)
27. Modi V., **A. Kondyli**, S. S. Washburn, D. S. McLeod. "A Freeway Capacity Estimation Method for Planning Applications" *ASCE Journal of Transportation Engineering*, 140(9), 2014. (10.1061/(ASCE)TE.1943-5436.0000699)
28. Soria, I., L. Elefteriadou, **A. Kondyli**, "Assessment of Car-Following Models by Driver Type and under Different Traffic, Weather Conditions using Data from an Instrumented Vehicle" *Simulation Modelling Practice and Theory* (40), Elsevier, pp. 208-220, 2014. (10.1016/j.simpat.2013.10.002)
29. Elefteriadou L., **A. Kondyli**, W. Brilon, F. Hall, B. Persaud, S. Washburn, "Enhancing Ramp Metering Algorithms with the Use of Probability of Breakdown Models" *ASCE Journal of Transportation Engineering*, 140(4), 2014. (10.1061/(ASCE)TE.1943-5436.0000653)
30. **Kondyli A.**, L. Elefteriadou, W. Brilon, F. Hall, B. Persaud, S. Washburn, "Development and Evaluation of Methods for Constructing Breakdown Probability Models" *ASCE Journal of Transportation Engineering*, 139(9), pp. 931-940, 2013. (10.1061/(ASCE)TE.1943-5436.0000574)
31. Yannis G., **A. Kondyli**, X. Georgopoulou, "Investigation of the Impact of Low Cost Engineering Measures on Road Safety in Urban Areas" *The International Journal of Injury Control and Safety Promotion*, May 2013. (10.1080/17457300.2013.796387)
32. Yannis G., **A. Kondyli** and N. Mitzalis, "Effect of Road Lighting Conditions on the Frequency and Severity of Road Accidents" *Proceedings of the Institution of Civil Engineers: Transport,* Vol 166(5), pp. 271-281, March 2013. (10.1680/tran.11.00047)

33. Antoniou C., **A. Kondyli**, G. Lykogianni, E. Gyftodimos, "Exploratory Assessment of the Limiting Extended Kalman Gain Matrix Properties" *Journal of Transportation and Communication*, Vol 14(1), pp. 1-12, March 2013. (10.2478/ttj-2013-0001)
34. **Kondyli A.**, and L. Elefteriadou, "Driver Behavior At Freeway-Ramp Merging Areas Based On Instrumented Vehicle Observations" *Transportation Letters: The International Journal of Transportation Research* Vol 4(3), pp. 129-141, July 2012. (10.3328/TL.2012.04.03.129-141)
35. **Kondyli A.,** I. Soria, A. Duret, and L. Elefteriadou, "Sensitivity Analysis of CORSIM with Respect to the Process of Freeway Flow Breakdown" *Simulation Modelling Practice and Theory* (22)*,* Elsevier, pp. 197-206, 2012. (10.1016/j.simpat.2011.12.008)
36. **Kondyli, A.**, and L. Elefteriadou. "Modeling Driver Behavior at Freeway-Ramp Merges" *Transportation Research Record: Journal of the Transportation Research Board* Vol. 2249, Transportation Research Board of the National Academies, Washington, DC, pp. 29-37, 2011. (10.3141/2249-05)
37. Sun, D.J., and **A. Kondyli. "**Modeling Vehicle Interactions During Lane Changing Behavior on Arterial Streets" *Computer-Aided Civil and Infrastructure Engineering*, Vol 25(8), pp. 557-571, November 2010. (10.1111/j.1467-8667.2010.00679.x)
38. **Kondyli, A.**, and L. Elefteriadou. "Driver Behavior at Freeway-Ramp Merging Areas: Focus Group Findings" *Transportation Research Record: Journal of the Transportation Research Board* Vol. 2124, Transportation Research Board of the National Academies, Washington, DC, pp. 157 - 166, 2009. (10.3141/2124-15)
39. Heaslip, K., **A. Kondyli**, D. Arguea, L. Elefteriadou, and F. Sullivan. "Estimation of Freeway Work Zone Capacity Using Simulation and Field Data" *Transportation Research Record: Journal of the Transportation Research Board* Vol. 2130, Transportation Research Board of the National Academies, Washington, DC, pp. 16 - 24, 2009. (10.3141/2130-03)

* Current/former student author

## BOOKS AND BOOK CHAPTERS

1. *Network Design and Optimization for Smart Cities*. "Congestion and Traffic Management at Urban Networks: State-of the-Art Approaches and Challenges". Series on Computers and Operations Research Vol. 8, Eds. K. Gakis and P. Pardalos. World Scientific. ISBN: 978-981-3200-00-5. March 2017.

## JOURNAL PAPERS UNDER REVIEW (pending decision)

1. Ali, Y., V.C. Kummetha*, A. Sharma, **A. Kondyli**. "Modelling Gazing Behaviour During a Secondary Task: A Correlated Grouped Random Parameters with Heterogeneity in Mean Approach". Submitted to *Transportation Research Record*, November 2024.
2. Shojaat, S., J. Geistefeldt, **A. Kondyli**. "Deriving Capacity and Critical Density of Basic Freeway Segments". Submitted to *Transportation Research Record*, December 2024.
3. Ahmadnezhad, P., J. M. Burns, A. E. Akinwuntan, M. Ranchet, **A. Kondyli**, J. Mahnken, H. Devos. "Slowed Driving Reaction Time in Preclinical Alzheimer's Disease". Submitted to *Journal of Applied Gerontology*. December 2024 (revise and resubmit).
4. Masud, S.S.B*, N. Akter*, B.W. Lane, **A. Kondyli**. "Leveraging Machine Learning Algorithms to Explore the Influencing Factors or Students' Mode Choice Preferences for Out-of-school-time Activities". Submitted to *Transportation*. Revise and resubmit, January 2025.

* Current/former student author

## CONFERENCE PRESENTATIONS (peer-reviewed)

1. Bakhti, B.*, **A. Kondyli**. “Safety Evaluation of Automated Vehicles Using Surrogate Safety Measures”. Accepted for presentation at the 104th Annual Meeting of the Transportation Research Board, Washington, DC, January 2025.
2. Shojaat, S., J. Geistefeldt, **A. Kondyli**. “Deriving Capacity and Critical Density of Basic Freeway Segments”. Accepted for presentation at the 104th Annual Meeting of the Transportation Research Board, Washington, DC, January 2025.
3. Rudro, R.*, S.S.B. Masud*, M. Rizvee, S. Wang, V.C. Kummetha*, **A. Kondyli**, C. Ramey, S. Shomaji, E. Chrysikou. “Using Machine Learning to Classify Driver Behavior from Psychological Features: An Exploratory Study”. Accepted for presentation at the 104th Annual Meeting of the Transportation Research Board, Washington, DC, January 2025.
4. **Kondyli, A.**, A. Davidson, C. Depcik, J. Haug, L. Koon, S. Motamedi, M. Eskandar, W. Giang, B. Hu, E. Jain, H. Yao, X. Zhao, A. Akinwuntan, S. Bhattacharya, H. Devos, “Assistive technology system for highly automated vehicles to support people with mild cognitive impairment: A human-centered design approach”. Accepted for presentation at the Applied Human Factors and Ergonomics (AHFE) International Conference, Hawaii, December 2024.
5. Masud, S.S.B.*, M. Tabatabaei*, **A. Kondyli**, “Exploiting Explainable Machine Learning Models to Reveal Critical Factors in Fatal Crashes across Pre-COVID, COVID, and Post-COVID Periods”, Accepted for poster presentation at the 9th Road Safety and Simulation – RSS2024 Conference, Lexington, KY, October 2024.
6. Mahajan, K., S.S.B. Masud*, G. Savoie*, **A. Kondyli**, “Who should yield at uncontrolled intersections? Improving safety using temporary signs”. Accepted for lectern presentation at the 9th Road Safety and Simulation – RSS2024 Conference, Lexington, KY, October 2024.
7. Masud*, S.S.B., Akter*, N., **A. Kondyli**, “Exploring the Mode Choice Preferences of Underrepresented Male and Female Students Attending Out-of-School-Time Activities”. Abstract accepted to the Transportation Research Board’s 7th International Conference on Women and Gender in Transportation (WGiT2024), Irvine, CA, September 2024.
8. Akter*, N., S.S.B. Masud*, B.W. Lane, **A. Kondyli**, “Analyzing Travel Behavior of Underrepresented Youth for Out-of-School-Time Activities Using Discrete Choice Modeling Techniques”. Accepted for presentation in the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2024.
9. Masud*, S.S.B., K. Mahajan, **A. Kondyli**, D. Deliali, G. Yannis, “Leveraging Machine Learning Algorithms to Predict and Analyze Single-Vehicle and Multi-Vehicle Crash Occurrences on Motorways”. Accepted for presentation in the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2024.
10. Ali, Y., V.C. Kummetha*, A. Sharma, **A. Kondyli**, “Secondary Task’s Effects on Gaze Durations: Evidence from a Driving Simulator Study”. Accepted for presentation in the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2024.
11. Guerra*, A., **A. Kondyli**, M. Asgharzadeh*, “Assessing Discretionary Lane Changing Decisions in a Connected Environment: A Driving Simulator Study with Advisory Messages”. Accepted for presentation in the 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2024.

12. Kummetha*, V.C., U. Durrani, J. Mason, S. Concas, **A. Kondyli**, "Driver Classification Using Self-reported, Phychophysiological, and Performance Metrics within a Simulated Environment". In Proceedings of the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 2023.
13. Masud*, S.S.B., M. Asgharzadeh*, S. Sajjadi, **A. Kondyli**, "A Sensitivity Analysis of Freeway CAV Platooning Parameters to use in Microsimulation". In Proceedings of the 102nd Annual Meeting of the Transportation Research Board, Washington, DC, January 2023.
14. Koon, L., A. Akinwuntan, S. Bhattacharya, A. Davidow, A. Davidson, C. Depcik, H. Devos, M. Eskandar, W. Giang, J. Haug, B. Hu, E. Jain, **A. Kondyli**, D. Kumar, Y. Liu, S. Motamedi, H. Yao, X. Zhao. "Optimizing Automated Driving Systems for People with Cognitive Impairments". In Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) Conference, July, 2022.
15. Kummetha*, V.C., U. Durrani, J. Mason, **A. Kondyli**, "Driver Classification Using Self-reported, Psychophysiological, and Performance Metrics within a Simulated Environment". In Proceedings of the 8th Road Safety & Simulation International Conference, Athens, Greece, June, 2022.
16. Kummetha, V.C.*, I.R. Khan*, **A. Kondyli**, S.D. Schrock, "Effectiveness of Non-Traffic Related Messages on Dynamic Message Signs". In Proceedings of the 100th Annual Meeting of the Transportation Research Board, Washington, DC, January, 2021.
17. Srisurin, P.*, **A. Kondyli**, "Integrating Car Following and Lane Changing in a Mixed Traffic Model of Connected Automated Vehicles and Conventional Vehicles". In Proceedings of the 100th Annual Meeting of the Transportation Research Board, Washington, DC, January, 2021.

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18. Johnson, M.*, Y. Li*, A. Pope*, A. Subirana*, T. Woodruff*, V.C. Kummetha*, **A. Kondyli**, T. DeAgostino, and C. Depcik. "Integration of an Anti-lock Braking System into a National Advanced Driving Simulator". In Proceedings of the Road Safety and Simulation Conference, Iowa City, IA, October, 2019.
19. McVey, M., **A. Kondyli**, C. Melgares*. "Assessment of Flipped Classroom and Team-based Learning Techniques in a Transportation Engineering Introductory Course". In Proceedings of the American Society for Engineering Education Annual Conference & Exposition, Tampa, FL, June 2019.
20. **A. Kondyli**, D. Hale, M. Asgharzadeh*, B. Schroeder, A. Jia, J. Bared, "Evaluating the Operational Effect of Narrow Lanes and Shoulders for the Highway Capacity Manual". In Proceedings of the 98th Annual Meeting of the Transportation Research Board, Washington, DC, January 2019.
21. Asgharzadeh, M.*, **A. Kondyli**, "Evaluating the Effect of Geometry and Control on Freeway Merge Bottleneck Capacity". In Proceedings of the 98th Annual Meeting of the Transportation Research Board, Washington, DC, January 2019.
22. Manjunatha, P., V.C. Kummetha*, **A. Kondyli**, L. Elefteriadou, "Validating the Task-Capability Extension to the Intelligent Driver Model (IDM) Using Driving Simulator Data". Extended abstract. In Proceedings of the 98th Annual Meeting of the Transportation Research Board, Washington, DC, January 2019.
23. D. Hale, L. Button, J. Argote, X. Zhang, C. Joshi, **A. Kondyli**, R. James, J. Bared, "Calibration of Microsimulation Car-Following Models for Narrow Freeway Lanes". Extended abstract. In

Proceedings of the 98th Annual Meeting of the Transportation Research Board, Washington, DC, January 2019.

**24.** Ghiasi, A., D. Hale, J. Bared, **A. Kondyli**, J. Ma, "A Dynamic Signal Control Approach for Integrated Ramp and Mainline Metering." In Proceedings of the 21st IEEE International Conference on Intelligent Transportation Systems, Maui, Hawaii, November 2018.

25. **Kondyli, A.,** M. McVey, "Implementation of Flipped Classroom and Active Learning Techniques in a Transportation Engineering Introductory Course." In Proceedings of the American Society of Engineering Education, Midwest section conference, Kansas City, MO, September 2018.
26. Asgharzadeh, M.*, **A. Kondyli**, "Comparison of Highway Capacity Estimation Methods." In Proceedings of the 97th Annual Meeting of the Transportation Research Board, Washington DC, January 2018.
27. Hale, D., G. Chrysikopoulos*, **A. Kondyli**, "Evaluation of Data-Driven Performance Measures for Comparing and Ranking Traffic Bottlenecks." Extended abstract. In Proceedings of the 97th Annual Meeting of the Transportation Research Board, Washington DC, January 2018.
28. Manjunatha, P., **A. Kondyli**, L. Elefteriadou, "How Has Driver Behavior Been Considered in Traffic Microsimulation Models and How Can we Use Cognitive Sciences and Psychology Studies to Enhance Them?". In Proceedings of the 96th Annual Meeting of the Transportation Research Board, Washington DC, January 2017.
29. Sajjadi, S., **A. Kondyli**, "Analysis of Managed Lanes on Freeway Facilities in South Florida: Macroscopic and Microscopic Approaches". In Proceedings of the 96th Annual Meeting of the Transportation Research Board, Washington DC, January 2017.
30. **Kondyli, A**., P. Gubbala*, L. Elefteriadou, "The Contribution of Ramp Demand in the Capacity of Merge Bottleneck Locations". In Transportation Research Procedia, International Symposium on Enhancing Highway Performance (ISEHP) 2016, Berlin, June 2016, 10.1016/j.trpro.2016.06.029.
31. **Kondyli, A.**, A. Barmpoutis, V. Sisiopiku, "Safety-Related Analysis of the 3D Driver Body Posture Using Naturalistic Data". In Proceedings of the 95th Annual Meeting of the Transportation Research Board, Washington DC, January 2016.
32. **Kondyli, A.**, A. Barmpoutis, V. Sisiopiku, L. Zhang, Zhao, L., M. Islam, S. Patil*, and S. Hosuri, "Analyzing 3D Body Posture Activity during Merging and Lane Changing Maneuvers". Road Safety and Simulation International Conference, Orlando, FL, October 2015.
33. **Kondyli, A**., B. St. George, L. Elefteriadou, "An Investigation of the Freeway Capacity Definition and Values at Various Types of Bottlenecks". In Proceedings of the 94th Annual Meeting of the Transportation Research Board, Washington, DC, January 2015.
34. Hale, D., **A. Kondyli**, F. T. Creasey, J. Ma, "Suggested RTOR Methodology Improvements for Urban Street Segments in the HCM". In Proceedings of the 94th Annual Meeting of the Transportation Research Board, Washington, DC, January 2015.
35. **Kondyli, A**., V. Sisiopiku, A. Barmpoutis, "Comparative Analysis of Driving Maneuvers Using 3D Body Posture Data". In Proceedings of the 5th International Conference on Applied Human Factors and Ergonomics (AHFE 2014), Kraków, Poland, July, 2014.
36. Li, Z., L. Elefteriadou, **A. Kondyli**. "Modeling Weather Impacts on Traffic Operations: Implementation into Florida's Travel Time Reliability Model". In Proceedings of the 93rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2014.

37. **Kondyli, A**., V. Sisiopiku, A. Barmpoutis, "A 3D Experimental Framework for Exploring Drivers' Body Activity Using Infrared Depth Sensors" (Best Paper Award Finalist). In Proceedings of the 2nd International Conference on Connected Vehicles & Expo (ICCVE 2013), Las Vegas, NV, December 2013.
38. Antoniou C., G. Lykogianni, E. Gyftodimos, **A. Kondyli**, "A Preliminary Exploration of the Limiting Extended Kalman Gain Matrix Properties". (Abstract peer-reviewed). In Proceedings of the 12th International Conference Reliability and Statistics in Transportation and Communication, Riga, Latvia, October 1012.
39. **Kondyli, A.,** I. Spyropoulou, C. Antoniou, and B. Psarianos, "Investigation of Traffic Flow Characteristics on Greek Freeways Under Dense Traffic Conditions". In Proceedings of the 3rd Pan-Hellenic Conference in Roadway Design, Athens, Greece, February 2012.
40. Elefteriadou L., W. Brilon, F. Hall, B. Persaud, S. Washburn and **A. Kondyli**, "Proactive Ramp Metering Based on Breakdown Probabilities". In Proceedings of the 6th ISHC World Congress, Stockholm, Sweden, July 2011.
41. **Kondyli, A**., I. Soria, A. Duret, and L. Elefteriadou, "How Well Does CORSIM Replicate the Process of Freeway Breakdown?" In Proceedings of the 90th Annual Meeting of the Transportation Research Board, Washington, DC, January 2011.
42. Elefteriadou L., **A. Kondyli**, W. Brilon, F. Hall, B. Persaud, S. Washburn, "Ramp Metering Enhancements For Postponing Freeway-flow Breakdown". In Proceedings of the 90th Annual Meeting of the Transportation Research Board, Washington, DC, January 2011.
43. **Kondyli, A**., and L. Elefteriadou, "Driver Behavior at Freeway-Ramp Merging Areas". In Proceedings of the 5th International Congress on Transport Research, Volos, Greece, September 2010.
44. **Kondyli, A**., and L. Elefteriadou, "Driver Behavior at Freeway-Ramp Merging Areas Based on Instrumented Vehicle Observations". In Proceedings of the 89th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2010.
45. Sun, J., **A. Kondyli**, and L. Elefteriadou, "Modeling Vehicle Interactions During Lane Changes Under Congested Conditions on Arterial Streets". In Proceedings of the 10th International Conference on Applications of Advanced Technologies in Transportation, Athens, Greece, May 2008.
46. **Kondyli, A**., A. Duret, and L. Elefteriadou, "Evaluation of CORSIM and AIMSUN for Freeway Merging Segments Under Breakdown Conditions". In Proceedings of the 86th Annual Meeting of the Transportation Research Board, Washington, D.C., January 2007.
47. **Kondyli, A**., L. Elefteriadou, and S. Washburn, "Development of an Arterial Travel Time Model with Consideration of Mid-Block Effects", In Proceedings of the 5th International Symposium in Highway Capacity, Yokohama, Japan, July 2006.
48. Lin P., L. Elefteriadou, and **A. Kondyli**, "A Ramp-Metering Algorithm Based On Probabilistic Breakdown". In Proceedings of the 1st International Symposium on Freeway and Tollway Operations, Athens, Greece, June 2006.
49. Elefteriadou L., C. Fang, R. Roess, E. Prassas, and **A. Kondyli**, "A Methodology for Evaluating the Operational Performance of Interchange Ramp Terminals", In Proceedings of the 2nd Pan-Hellenic Conference in Roadway Design, Volos, Greece, May 2005.

* Current/former student author

## CITATION METRICS

*Google Scholar Indices*
Citations: 1327
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*Scopus Indices*
Citations: 696
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## RESEARCH REPORTS

1. National Academies of Sciences, Engineering, and Medicine. "Operational Performance and Safety Effects of Arterial Weaving Sections". Washington, DC: The National Academies Press. 2024. https://doi.org/10.17226/27816.
2. **Kondyli, A.**, L. Koch, J. Watson-Thompson, J. Mayo, K. Larson. "SCC-CIVIC-FA Track A: Connecting underrepresented youths with employment opportunities". Final Report, National Science Foundation. January 2024.
3. **Kondyli, A.**, Mahajan, K. S. D. Schrock. "The Effects of Truck Platooning on the Kansas Workforce" Prepared for the Kansas Department of Transportation, Draft Final Report, November 2023.
4. **Kondyli, A.**, S. D. Schrock, M. Tabatabaei, V. C. Kummetha. "Evaluation of Ramp Metering Effectiveness Along the I-35 Corridor in the Kansas City Metropolitan Area". Prepared for the Kansas Department of Transportation, Final Report, May 2024.
5. **Kondyli, A.**, K. Mahajan, G. Savoie, S.S.B. Masud. "Use of Temporary Signs at Uncontrolled Intersections". Final Report. City of Topeka, Public Works Department, Topeka, KS, December 2022.
6. Schrock, S.D., **A. Kondyli**, H. Mohammed, and A. Asgharzadeh. "A Guide to Work Zone Temporary Traffic Control Near Signalized/Unsignalized Intersections". University of Kansas Transportation Center, Lawrence, KS, December 2022.
7. **Kondyli, A.,** A. Davidson, C. Depcik, L. Koon, S. Motamedi, W. Giang, B. Hu, E. Jain, X. Zhao, A. Akinwuntan, S. Bhattacharya, H. Devos. "Optimizing Highly Automated Driving Systems for People with Cognitive Disabilities". US DOT Inclusive Design Challenge Stage II Final Report, May 2022.
8. **Kondyli, A**, S. D. Schrock, F. Tousif. "Evaluation of Near-Miss Crashes Using a Video-Based Tool". Prepared for the Kansas Department of Transportation, Final Report, November 2023.
9. **Kondyli, A.**, V.C. Kummetha, "Modeling Driver Behavior and Aggressiveness Using Biobehavioral Methods – Part III." Lincoln, Nebraska: Mid-America Transportation Center, University of Nebraska-Lincoln. February 2022.
10. **Kondyli, A.**, L. Koch, J. Watson-Thompson, A. Ellis, K. Larson. "SCC-CIVIC-PG Track A: Connecting underrepresented youths with employment opportunities". Final Report, National Science Foundation. 2021.
11. Hale, D., **A. Kondyli**, J. Argote, X. Zhang, B. Schroeder, L. Button, J. Atkinson, D. Stock, A. Cheema, S. Sajjadi, M. Aycin, M. Brackstone, Canayon, J. Casas, A. Lenorzer, H. Jia, C. Joshi. "Narrowing Freeway Lanes and Shoulders to Create Additional Travel Lanes". No. FHWA-HRT-21-005. June 2021.

12. Hale, D.K., J. Ma, A. Ghiasi, P. Volet, B. Cesme, **A. Kondyli**, B. Schroeder, S. Sethi, L. Torres, and F. Belisle. "Alternative Designs to Alleviate Freeway Bottlenecks at Merging, Diverging, and Weaving Areas". No. FHWA-HRT-20-008. May 2020.
13. **Kondyli, A**, S. D. Schrock, I. R. Khan. "Effectiveness of Entertaining, Non-Traffic-Related Messages on Dynamic Message Signs". Prepared for the Kansas Department of Transportation, Final Report, March 2020.
14. **Kondyli, A.**, S. D. Schrock, B. W. Lane, M. Asgharzadeh. "Promoting the Transportation Systems Management & Operations Program in Kansas". Prepared for the Kansas Department of Transportation, Final Report, February 2020.
15. **Kondyli, A.**, E. G. Chrysikou, V. C. Kummetha. "Modeling Driver Behavior and Aggressiveness Using Biobehavioral Methods – Part II". (Report No. 25-1121-0005-153-2). Lincoln, Nebraska: Mid-America Transportation Center, University of Nebraska-Lincoln. January 2020.

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16. **Kondyli, A.** "Driver Body Posture Modeling in a Driving Simulator Environment". KU Center for Research, University of Kansas, Final Report, January 2019.
17. **Kondyli, A.**, E. G. Chrysikou, C. H. Ramey, V. C. Kummetha. "Modeling Driver Behavior and Aggressiveness Using Biobehavioral Methods – Part I". (Report No. 25-1121-0005-153-1). Lincoln, Nebraska: Mid-America Transportation Center, University of Nebraska-Lincoln. December 2018.
18. **Kondyli, A.**, S. D. Schrock, G. Chrysikopoulos. "Improving the Accuracy and Applicability of Kansas Traffic Data". Prepared for the Kansas Department of Transportation, Final Report, March 2018.
19. Ho, A.T., J. Koncur, T. Lei, **A. Kondyli**, E. Sutley. "Harnessing Big Data to Evaluate the Impacts of Tax Incentive Districts on Residential Property Values in Johnson County". Prepared for Johnson County, Kansas, Draft Final Report, May 2017.
20. Barmpoutis, A., **A. Kondyli**, and V. P. Sisiopiku. "Investigating the Effect of Drivers' Body Motion on Traffic Safety". Southeastern Transportation Research, Innovation, Development and Education (STRIDE) Center, Draft Final Report, November 2015.
21. Hadi, M., L. Elefteriadou, Y. Xiao, **A. Kondyli**, A. Darroudi, C. Letter. "Investigation of ATDM Strategies to Reduce the Probability of Breakdown". Southeastern Transportation Research, Innovation, Development and Education (STRIDE) Center, Final Report, August 2015.
22. Elefteriadou, L., **A. Kondyli**, and B. St. George. "Estimation of Capacities on Florida Freeways". Prepared for FDOT, Final Report, September 2014.
23. Elefteriadou, L., **A. Kondyli**, and B. St. George. "Comparison of Methods for Measuring Travel Time at Florida Freeways and Arterials". Prepared for FDOT, Final Report, July 2014.
24. Yin, Y., L. Elefteriadou, Z. Song, N. Shirmohammadi, G. Carrick, and **A. Kondyli**. "Lifting HOV/HOT Lane Eligibility and Shoulder Use Restrictions for Traffic Incident Management". Prepared for FDOT, Final Report, December 2013.
25. Antoniou, C., **A. Kondyli**, and E., Gyftodimos. "Investigation of Performance Characteristics of On-line Calibration Algorithms for Dynamic Traffic Assignment of Large Scale Networks". Prepared for the National Technical University of Athens, Final Report, January 2013.
26. Elefteriadou, L., **A. Kondyli**, F. Hall, B. Persaud, L. Jacobson, and S. Washburn. "Proactive Ramp Management Under the Threat of Freeway-Flow Breakdown". Prepared for the National Cooperative Highway Research Program 3-87, Final Report, December 2009.

27. Elefteriadou, L., D. Arguea, **A. Kondyli**, K. Heaslip, "Impact of Trucks on Arterial LOS and Freeway Work Zone Capacity - Part B: Freeway Work Zone Capacity". Prepared for the FDOT, Final Report, July 2007.
28. Washburn S., and **A. Kondyli**, "Development of Guidelines for Driveway Location and Median Configuration in the Vicinity of Interchanges". Prepared for the FDOT, Final Report, March 2006.
29. Elefteriadou, L., C. Fang, R. Roess, E. Prassas, J. Yeon, X. Cui, **A. Kondyli**, H. Wang, J. Mason, "Capacity and Quality of Service of Interchange Ramp Terminals". NCHRP 3-60, Final Report, March 2005.

## PRESENTATIONS & NON-PEER-REVIEWED PUBLICATIONS

1. Depcik, C., L. Zeng, **A. Kondyli**, "Merging Fluid Mechanics and Traffic Flow Theory with New Insight into Car Following Models". Accepted for presentation at the SAE World Congress Experience 2025, Detroit, MI, April 8-10, 2025.
2. **Kondyli, A.**, "Optimizing Automated Driving Systems for People with Cognitive Disabilities". Kansas Innovative Tech Summit, Lawrence, KS, August 7, 2024.
3. Sajjadi, S., J. Lohmiller, **A. Kondyli**, W. Jin, M. Tabatabaei*, M. Martin-Gasulla, "A Lane Utilization-based Calibration for Modeling Driver Behavior in the Vicinity of Managed Lanes". **Invited talk:** Freeway & CAV Simulation Subcommittee, ACP20 Standing Committee, 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2024.
4. Sajjadi, S., J. Lohmiller, **A. Kondyli**, W. Jin, M. Tabatabaei*, M. Martin-Gasulla, "A Lane Utilization-based Calibration for Modeling Driver Behavior in the Vicinity of Managed Lanes". Accepted for poster presentation at the Managed Lanes Standing Committee Meeting, 103rd Annual Meeting of the Transportation Research Board, Washington, DC, January 2024.
5. Sajjadi, S., **A. Kondyli**, "Macroscopic and Microscopic Analyses of Managed Lanes on Freeway Facilities in South Florida". 24th PTV Annual User Group Meeting, Orlando, FL, October 25-26, 2023.
6. **Kondyli, A.**, "Cognitive Overload in Automated Vehicles". Accessible Mobility Collaborative Summit, University of Michigan MCity, Ann Arbor, October 12, 2023.
7. **Kondyli, A.**, W. C.W. Giang, "Optimizing Automated Driving Systems for People with Cognitive Disabilities". US DOT Inclusive Design Challenge follow-up, online meeting, June 14, 2023.
8. **Kondyli, A.**, "Connecting Underrepresented Youths with Employment Opportunities". **Invited talk:** Online presentation to the Frontiers Clinical & Translational Science Institute at the University of Kansas, Multi-disciplinary Advocate & Researchers Group, January 19, 2023.
9. **Kondyli, A.**, "Big Data, Artificial Intelligence & Inclusive Design". **Invited talk:** Online presentation in Careers in Transportation Course, University of Florida, October 6, 2022.
10. Yao, H., S. Motamedi, W. C. W. Giang, **A. Kondyli**, E. Jain, "In-vehicle Alertness Monitoring for Older Adults". arXiv:2208.08091v1. https://doi.org/10.48550/arXiv.2208.08091
11. **Kondyli, A.**, "Modeling Driver Behavior and Aggressiveness Using Bio-behavioral Methods". **Invited talk:** Florida DOT Safety Research Office, online meeting, January 28, 2022.

12. **Kondyli, A.**, S. Motamedi, "Optimizing Automated Driving Systems for People with Cognitive Disabilities". **Invited talk:** US DOT Inclusive Design Challenge Charrette, online meeting, January 24, 2022.
13. Motamedi, S., **Kondyli, A.**, "Optimizing Automated Driving Systems for People with Cognitive Disabilities". **Invited talk:** ACH40 Standing Committee of the Transportation Research Board on Human Factors of Infrastructure Design and Operations, Transportation Research Board Annual Meeting, January 10, 2022.
14. Sajjadi, S., **A. Kondyli**, M. Asgharzadeh*, S.S. Masud*, "Evaluation of CAV Platooning on Uninterrupted Freeway Merge Bottleneck Capacity". **Invited talk:** Freeway and CAV Simulation Subcommittee ACP20(4) Annual Meeting, Washington, DC, January 2022.
15. Kondyli, A., "Studying driver behavior, driver variability, and user characteristics to improve traffic models and tools". **Invited talk:** Traffic and Transportation Safety Lab, TU Delft, October 2021.
16. **Kondyli, A.**, "Connecting underrepresented youths with employment opportunities". **Invited talk:** 311 Data – KC Digital Drive MetroLab Symposium, online meeting, April 2021.
17. Kummetha, V.C., **A. Kondyli**, "Modeling Driver Behavior and Aggressiveness Using Bio-behavioral Methods". **Invited talk:** Mid-America Transportation Center webinar series, September 2020.
18. Asgharzadeh, M.*, S. Sajjadi, **A. Kondyli**, "Evaluation of CAV Platooning on Uninterrupted Freeway Merge Bottleneck Capacity Using VISSIM". Automated Vehicles Symposium, Breakout session 17 – Roadway capacity effects of CAVs: how much and when? online meeting, July 2020.
19. Guerra, A. H.*, M. Asgharzadeh*, **A. Kondyli**, "Discretionary Lane Changing Decisions for Connected Automated Vehicles Based on Fuzzy Logic". 99th Annual Meeting of the Transportation Research Board, Washington, DC, January 2020.
20. Alsharari, A.*, M. Asgharzadeh*, **A. Kondyli**, "Estimation of the Effect of Rain and Incidents on Freeway Capacity and Free-Flow Speed". 99th Annual Meeting of the Transportation Research Board, Washington, DC, January 2020.

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21. Kummetha, V.C.*, **A. Kondyli,** E. G. Chrysikou, S. D. Schrock**.** "Incorporating Biobehavioral Architecture into Car-Following Models". Road Safety and Simulation Conference, Iowa City, IA, October, October 2019.
22. **Kondyli, A.**, D. Hale, M. Asgharzadeh*, B. Schroeder, A. Jia, J. Bared. "Evaluating the Operational Effect of Narrow Lanes and Shoulders for the Highway Capacity Manual". Kansas Transportation Conference, Manhattan, KS, April 2019.
23. **Kondyli, A.**, S. Schrock. "Before/After Safety and Mobility Evaluation of the I-35 Ramp Meters". IMSA Annual Conference, Lawrence, KS, March 2019.
24. **Kondyli, A.** "Improving the Accuracy and Applicability of Kansas Traffic Data". **Invited talk:** Kansas Department of Transportation – Research Program Council Meeting, Topeka, KS, September 2018.
25. **Kondyli, A.** "Towards Realistic Models of Driver Behavior". **Invited talk:** Department of Civil and Environmental Engineering, University of Arkansas, Fayetteville, AR, September 2018.
26. Hale, D. K., Button, L., Argote, J., Joshi, C., Zhang, X., **Kondyli, A.,** James, R., Bared, J. "Development of a Microsimulation Car-Following Model for Narrow Freeway Lanes."

Traffic Flow and Characteristics Committee (TRB AHB-45) Summer Meeting, Woods Hole, MA, August, 2018.

27. **Kondyli, A.** "Towards Realistic Models of Driver Behavior". **Invited talk:** IVT Group, ETH Zürich, Switzerland, January 2018.
28. **Kondyli, A.** "Ramp Metering and the Probability of Breakdown". Invited talk: School of Civil Engineering, National Technical University of Athens, Greece, December 2017.
29. **Kondyli, A.** "Self-Driving Vehicles". **Invited talk:** University of Kansas, Red Hot Research Series - People and AI: Promise or Peril? Lawrence, KS, May 2017.
30. **Kondyli, A.** "Connected and Automated Vehicles". **Invited talk:** University of Kansas, Red Hot Research Series – Smart Cities, Lawrence, KS, September 2016.
31. **Kondyli, A.** "HCM 6th Edition. What's New in the HCM?" **Invited talk:** Kansas City Institute of Transportation Engineers (KCITE), Overland Park, KS, July 2016.
32. **Kondyli, A.**, B. Schroeder, K. Lemke. "HCM 6th Edition – Freeway Facilities Workshop". International Symposium on Enhancing Highway Performance (ISEHP) 2016, Berlin, June 2016.
33. Sajjadi, S., **A. Kondyli**, K. Bright, "Driver Behavior Model Calibration at the Basic Managed Lanes Segments – South Florida Case Study". 15th International Conference on Managed Lanes, Miami, FL, May 2016.
34. Ho, A., E. Sutley, **A. Kondyli**, B. Johnson, "Building an Adaptive System for Multiple Policy Goals in Cities". In Proceedings of the IEEE Smart Cities Workshop, Kansas City, MO, February 2016.
35. **Kondyli, A.**, A. Barmpoutis, V. Sisiopiku, "Safety-Related Analysis of the 3D Driver Body Posture Using Naturalistic Data". **Invited talk:** University of Iowa – National Advanced Driving Simulator (NADS), Iowa City, IA, February 2016.
36. **Kondyli, A.**, A. Barmpoutis, and V. Sisiopiku. "A 3D Experimental Framework for Exploring Drivers' Body Activity Using Infrared Depth Sensors". 2nd Annual Postdoctoral Symposium of the University of Florida, Gainesville, FL, April 2014.
37. **Kondyli, A.**, A. Barmpoutis, and V. Sisiopiku. "Investigation of the Effect of Drivers' Body Motion on Traffic Safety". 2nd Annual UTC Conference for the Southeastern Region, Atlanta, GA, March 2014.
38. Darroudi, A., M. Hadi, Y. Xiao, C. Letter, **A. Kondyli**, and L. Elefteriadou. "Adaptive Variable Speed Limit Strategy to Reduce Shockwave Upstream of Bottlenecks". 2nd Annual UTC Conference for the Southeastern Region, Atlanta, GA, March 2014.
39. Letter, C., **A. Kondyli**, and L. Elefteriadou. "Incorporating the Probability of Breakdown for Ramp Metering and VSL Applications". AHB20 Freeway Operations Committee of the Transportation Research Board Midyear Meeting, Atlanta, GA, June 2013.
40. **Kondyli, A.** "Driver Behavior at Freeway-Ramp Merging Areas". 1st Annual Postdoctoral Symposium of the University of Florida, Gainesville, FL, April 2013.
41. Hadi, M., L. Elefteriadou, **A. Kondyli**, Y. Xia, C. Letter, and A. Darroudi. "Investigation of ATDM Strategies to Reduce the Probability of Breakdown". 1st Annual UTC Conference for the Southeastern Region, Orlando, FL, April 2013.
42. **Kondyli, A.** "Safe Transport of Heavy Vehicles". **Invited talk:** 1-Day training seminar for heavy vehicle drivers organized by Projectyou and the Greek Council for the Safe Transport of Dangerous Goods, Athens, December 4, 2011.

43. **Kondyli, A.** "Modeling Driver Behavior at Freeway Ramp Merges". **Invited talk:** Webinar presentation invited by the Traffic Flow and Characteristics Committee (AHB-45) of the Transportation Research Board, September 30, 2011.
44. **Kondyli, A.** "How Well Does CORSIM Replicate the Process of Freeway-Flow Breakdown?" **Invited Speaker:** Webinar presentation invited by the Traffic Flow and Characteristics Committee (AHB-45) of the Transportation Research Board, May 6, 2011.
45. **Kondyli, A.** "Low-Cost High-Efficiency Measures for Improving Traffic and Parking Operations". Conference on Transportation Issues of Municipalities of the Attica Region, Hellenic Institute of Transportation Engineers, Athens, Greece, February 9, 2011.
46. **Kondyli, A.** "Sensitivity Analysis of CORSIM and AIMSUN with Respect to Freeway Flow Breakdown". **Invited Researcher/Speaker**: MULTITUDE Project Meeting, funded by the European Union COST Action TU0903, Naples, Italy, February 7-8, 2011.
47. **Kondyli, A.** "Road Safety for Young Drivers". **Invited talk:** 2-day workshop on Road Safety organized by the Police Department of Naypaktos, Naypaktos, Greece, November 2010.
48. **Kondyli, A.** "Driver Behavior at Freeway-Ramp Merging Areas: Focus Group Findings". 2nd Annual Student Conference. Center for Multimodal Solutions for Congestion Mitigation, University of Florida, Gainesville, FL, March 2009.
49. **Kondyli, A.** "Breakdown Probability Model at Freeway-Ramp Merges Based on Driver Behavior". 88th Transportation Research Board Annual Meeting, Doctoral Student Research in Transportation Operations and Traffic Control, Washington, D.C., January 2009.
50. **Kondyli, A.** "Driver Behavior at Freeway-Ramp Merging Areas: Focus Group Findings" (*Best Student Poster Award*). ITS-TRANSPO Conference, Orlando, FL, September 2008.
51. **Kondyli, A.** "Breakdown Probability Model at Freeway-Ramp Merges Based on Driver Behavior". 1st Annual Student Conference. Center for Multimodal Solutions for Congestion Mitigation, University of Florida, Gainesville, FL, March 2008.

* Current/former student author

## NEWS ARTICLES

1. Podcast on Assistive Technology Update: ATU558 – Optimizing Highly Automated Driving Systems for People with Cognitive Disabilities. https://www.eastersealstech.com/category/assistive-tech-update/ February 4, 2022
2. Interview with Partners for Automated Vehicle Education (PAVE) – Meet the Inclusive Design Challenge Semifinalists! July 12, 2021 https://www.youtube.com/watch?v=1j9qaQzjHf0&list=PL_JmOf0_QaCVKYh2IHH7u-4FE0NCve4dI&index=9&t=4s
3. Representative Davids Announces $1 Million Grant for Pilot Program to Help Kansas City Youth Access Extracurricular Opportunities, September 27, 2021 https://davids.house.gov/media/press-releases/davids-announces-1-million-grant-pilot-program-help-kansas-city-youth-access
4. KU Awarded $1M to Help Connect Underrepresented KC Youths with 'Out-of-School' Opportunities October 22, 2021 http://news.ku.edu/2021/10/22/ku-awarded-1m-help-connect-underrepresented-kc-youths-out-school-opportunities

5. National Science Foundation - Pilot programs help workers and students cross transit deserts. December 9, 2021 https://beta.nsf.gov/science-matters/pilot-programs-help-workers-and-students-cross-transit-deserts
6. Metrolab/Government Technology - Improving Transit Options for Underserved Youth in Kansas City. January 27, 2022 https://www.govtech.com/transportation/improving-transit-options-for-underserved-youth-in-kansas-city

## ONLINE PROFESSIONAL DEVELOPMENT TRAINING MATERIAL

1. Schrock, S.D., **A. Kondyli**, H.J. Mohammed, and A. Asgharzadeh. "Work Zone Signal Retiming Opportunities," FHWA Work Zone Safety Training Grant module, https://sites.google.com/view/fhwatrainingprogram/training-programs/work-near-signalized-and-unsignalized-intersections, December 2022. Online.
2. Schrock, S.D., **A. Kondyli**, H.J. Mohammed, and A. Asgharzadeh. "Practical Checklist of Work Zone Related Intersections," FHWA Work Zone Safety Training Grant module, https://sites.google.com/view/fhwatrainingprogram/training-programs/work-near-signalized-and-unsignalized-intersections, December 2022. Online.
3. Schrock, S.D., **A. Kondyli**, H.J. Mohammed, and A. Asgharzadeh. "Work Zones in Innovative Intersections," FHWA Work Zone Safety Training Grant module, https://sites.google.com/view/fhwatrainingprogram/training-programs/work-near-signalized-and-unsignalized-intersections, December 2022. Online.
4. Schrock, S.D., **A. Kondyli**, H.J. Mohammed, and A. Asgharzadeh. "Work Near Signalized and Unsignalized Intersections: Manual on Uniform Traffic Control Devices (MUTCD) – Part 2," FHWA Work Zone Safety Training Grant module, https://sites.google.com/view/fhwatrainingprogram/training-programs/work-near-signalized-and-unsignalized-intersections, December 2022. Online.
5. Schrock, S.D., **A. Kondyli**, H.J. Mohammed, and A. Asgharzadeh. "Work Near Signalized and Unsignalized Intersections: Manual on Uniform Traffic Control Devices (MUTCD) – Part 1," FHWA Work Zone Safety Training Grant module, https://sites.google.com/view/fhwatrainingprogram/training-programs/work-near-signalized-and-unsignalized-intersections, December 2022. Online.

## TEACHING ACTIVITY

| Course Number & Title | Sem/Year | # Enrolled | Evaluation |
|---|---|---|---|
| CE 480 Introduction to Transportation Engineering | Spring 2024 | 29 | 4.48/5 |
| CE 881 Traffic Engineering Operations | Spring 2024 | 3 | 5/5 |
| CE 781 Traffic Engineering Characteristics | Fall 2023 | 4 | 5/5 |
| CE 790 Traffic Simulation Modeling and Analysis | Spring 2023 | 3 | 5/5 |
| CE 881 Traffic Engineering Operations | Fall 2022 | 1 | N/A† |
| CE 480 Introduction to Transportation Engineering | Spring 2022 | 36 | 4.65/5 |
| CE 781 Traffic Engineering Characteristics | Spring 2022 | 5 | 5/5 |
| CE 480 Introduction to Transportation Engineering | Spring 2021 | 41 | 4.63/5 |

| | | | |
|---|---|---|---|
| CE 781 Traffic Engineering Characteristics | Fall 2020 | 7 | 5/5 |
| CE 790 Traffic Simulation Modeling and Analysis | Spring 2020 | 4 | N/A* |
| CE 480 Introduction to Transportation Engineering | Spring 2020 | 43 | N/A* |
| CE 881 Traffic Engineering Operations | Fall 2019 | 3 | 4.75/5 |
| CE 480 Introduction to Transportation Engineering | Spring 2019 | 46 | 4.14/5 |
| CE 781 Traffic Engineering Characteristics | Spring 2019 | 9 | 4/5 |
| CE 895 Traffic Simulation Modeling and Analysis | Fall 2018 | 5 | 5/5 |
| CE 480 Introduction to Transportation Engineering | Spring 2018 | 38 | 4.21/5 |
| CE 781 Traffic Engineering Characteristics | Fall 2017 | 9 | 4.59/5 |
| CE 480 Introduction to Transportation Engineering | Spring 2017 | 40 | 4.69/5 |
| CE 895 Traffic Simulation Modeling and Analysis | Spring 2017 | 6 | 4.33/5 |
| CE 881 Traffic Engineering Operations | Fall 2016 | 7 | 4.57/5 |
| CE 480 Introduction to Transportation Engineering | Spring 2016 | 38 | 4.12/5 |
| CE 240 Geomatics | Fall 2015 | 28 | 3.58/5 |
| CE 480 Introduction to Transportation Engineering | Fall 2014 | 28 | 3.81/5 |

***** *no official course evaluation due to COVID-19*

† *no official course evaluation due to the low student enrollment*

## STUDENT ADVISING

*Undergraduate students*

| | | | |
|---|---|---|---|
| Fall 2014 | 9 students | Spring 2019 | 12 students |
| Spring 2015 | 9 students | Fall 2019 | 12 students |
| Fall 2015 | 10 students | Spring 2020 | 13 students |
| Spring 2016 | 10 students | Fall 2020 | 14 students |
| Fall 2016 | 9 students | Spring 2021 | 14 students |
| Spring 2017 | 8 students | Fall 2021 | none (on sabbatical leave) |
| Fall 2017 | 11 students | Spring 2022 | 14 students |
| Spring 2018 | 12 students | | |
| Fall 2018 | 12 students | | |

*Committee Chair: Masters*

1. Jessica Mechlowitz, MCE (non-thesis), Fall 2024 – Fall 2026 (expected).
2. Aayush Maan Karki, MS, Fall 2024 – Spring 2026 (expected), TBD.
3. Nazifa Akter, MS, Spring 2022 – Fall 2023, Analyzing Travel Behavior and Mode Choice of Underrepresented Youth for Out-of-School-Time Activities Using Discrete Choice Modeling Techniques.

4. Irtiza Rafid Khan, MS, Fall 2018 – Spring 2020, Effectiveness of Entertaining, Non-Traffic Related Messages on Dynamic Message Signs.
5. Georgios Chrysikopoulos, MS, Spring 2016 – Fall 2019, Development of a Driver Behavior Model for Manual and Automated Control Considering Driver Cognition.
6. Akshay Patel, MS, Spring 2017 – Fall 2019, Estimating the Effect of Connected and Autonomous vehicles (CAVs) on Capacity and Level of Service at Freeway Merge Segments
7. Abdulmajeed Alsharari, MS, Spring 2017 – Spring 2019, Estimation of the Effect of Rain and Incidents on Freeway Capacity and Free-Flow Speed.
8. Agustin Guerra, MS, Fall 2017 – Spring 2019, Modeling Discretionary Lane Changing Decisions for Connected Vehicles Based on Fuzzy Logic.
9. Mohammad Shehada, MS, Fall 2015 – Spring 2017, Evaluation of Ramp Metering Algorithms Using Microsimulation.
10. Vishal Kummetha, MS, Fall 2015 – Fall 2017, Analysis of the Effects of Adaptive Cruise Control (ACC) on Driver Behavior and Awareness Using a Driving Simulator (Honors).
11. Phani Gubbala, MS, Spring 2015 – Spring 2017, Effect of On-Ramp Demand on Capacity at Merge Bottleneck Locations.

*Committee Chair: Doctoral*

1. Bahareh Bakhti, Spring 2023 – present (expected Fall 2026), TBD.
2. Mahgam Tabatabaei, Spring 2023 – present (expected Fall 2026), TBD.
3. Saumik Sakib Bin Masud, Spring 2021 – present (expected Fall 2024), Modeling and Integrating Risk Perception into Car Following Models for Manual and Semi-Automated Vehicles: A Deep Learning Approach.
4. Fahmid Tousif, Fall 2020 – Fall 2024, Development of Arterial Weaving Behavior Models Using Statistical and Machine Learning Methods.
5. Punyaanek Srisurin, Spring 2017 – Fall 2020, Development of a Simulation Platform for Mixed Traffic of Connected Automated Vehicles and Conventional Vehicles on Freeways.
6. Vishal Kummetha, Fall 2017 – Spring 2020, Incorporating Biobehavioral Architecture into Car-Following Models: A Driving Simulator Study (Honors).
7. Mohammadamin Asgharzadeh, Fall 2016 – Spring 2020, Lane-Based Cell Transmission Model for Macroscopic Freeway Evaluation (Honors).

*Committee Member: Doctoral*

1. Mashfiq Rizvee, PhD EECS KU, Fall 2022 – present
2. Lanxi Liu, PhD CEAE KU, Fall 2019 – present
3. Shibasish Dutta Roy, PhD CEAE KU, Fall 2019 – present
4. Hassan Abu Saq, PhD University of Southampton, Civil, Maritime and Environmental Engineering, Spring 2024
5. Mamdouh Mohamed, PhD CEAE KU, Fall 2017 – Spring 2022
6. Seyedeh Farzaneh Mahlab, Ph.D. CEAE KU, Fall 2015 – Summer 2019
7. Hemin J. Mohammed, Ph.D. CEAE KU, Fall 2015 - Spring 2019
8. Hardy K. Karim, Ph.D. CEAE KU, Spring 2012 - Fall 2015

*Committee Member: Masters*

1. Moses Azu, MS CEAE KU, Fall 2024 – present
2. Hans Bodtcher, MS CEAE (non-thesis) KU, Fall 2023 – present
3. Sumon Mojumder, MS CEAE KU, Spring 2021 – Fall 2023
4. John Haug, MS ME KU, Spring 2021 – Spring 2023
5. Abigail Davidow, MS EECS KU, Fall 2021 – Spring 2023
6. Karsh Bhatt, MCE KU, Fall 2021 – Spring 2023
7. Young In Chang, MCE (non-thesis) KU, Fall 2020 – Spring 2023
8. Adam Alani, MS CEAE KU, Fall 2021 – Fall 2022
9. Mubarak Alshatti, MS CEAE KU, Fall 2020 – Summer 2022
10. Hailey Neidig, MCE (non-thesis) KU, Spring 2021 – Summer 2022
11. Eslam Elattar, MCE (non-thesis) KU, Spring 2020 – Spring 2022
12. Auston Jacobsen, MS CEAE KU, Spring 2017 – Spring 2021
13. Nikhila Gunda, MCM KU, Summer 2018 – Spring 2020

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14. Brandon Vacek, MCE KU, Fall 2013 – Summer 2016
15. Sampath Kadiyala, MS CEAE KU, Fall 2014 – Spring 2017
16. Akshit Ahuja, MS CEAE KU, Fall 2015 – Summer 2017
17. Bharath Reddy Kolli, MS CEAE KU, Fall 2013 – Spring 2015
18. Vishal Sarikonda, MS CEAE KU, Fall 2013 – Spring 2015
19. Hemin Mohammed, MS CEAE KU, Fall 2013 – Spring 2015
20. Becky Bonebrake, MCE (non-thesis) KU, Fall 2010 – Spring 2014

*Post-doctoral Associates*

1. Luwei Zeng, PhD: September 2023 – August 2024.
2. Kirti Mahajan, PhD: July 2022 – December 2023.

## STUDENT SUPERVISING

1. RokunuzJahan Rudro (June 2023 – present) EECS KU MS student.
2. Vaibhav Venkatesh (November 2022 – present) EECS KU undergraduate student.
3. Grace Savoie (July 2021 – May 2023) CEAE KU undergraduate student.
4. Deepak Kumar (August 2021 – May 2022) EECS KU undergraduate student.
5. John Rono (March 2021 – May 2021) CEAE KU, Transportation Engineering MS student.
6. Diego Pizarro (October 2020 – December 2021) CEAE KU undergraduate student.

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7. Zeyad Dessouki (May 2019 – May 2020) CEAE KU undergraduate student.
8. Caroline Gatti (September 2018 – May 2019) CEAE KU undergraduate student.
9. Adeyoyin Imam (September 2015 – May 2019): CEAE KU undergraduate student.
10. Sai Yerradoddi (September 2016 – May 2017): CEAE KU undergraduate student (senior).
11. Patricia Harumi Arakaki Mascarenhas (May 2015 – July 2015): Visiting Civil Engineering undergraduate student, Wayne State University/Brazilian Scientific Mobility Program.
12. Shivraj Patil (January 2015 – May 2015): CEAE KU, Transportation Engineering MS student.
13. Zifeng Li (September 2014 – December 2014): CEAE KU undergraduate student.

## PROFESSIONAL ACTIVITIES

- **Member** of the PTV Group Academic Committee (since 2024)
- **Member/Secretary** of the TRB Standing Committee on Highway Capacity and Quality of Service ACP40 (since 2022)
- **Member/paper review coordinator** of the TRB Standing Committee on Road User Measurement and Evaluation ACH50 (since 2019)
- **Member** of the Kansas Statewide AV/CV Task Force (since 2019)
- **Member** of the Institute of Transportation Engineers (ITE) (since 2017)
- **Associate Member** of the ASCE – T&DI Street and Highway Operations Committee (since 2016)
- **Associate Member** of the ASCE – T&DI Transportation Safety Committee (since 2016)
- **Chair** of the Uninterrupted Flow Subcommittee of the Highway Capacity & Quality of Service TRB Committee ACH40 (2019-2022)
- **Chair** of the Freeways/Multilane Highways Subcommittee of the Highway Capacity & Quality of Service TRB Committee ACH40 (2014-2019)
- **Associate Member** of American Society of Civil Engineers (ASCE) (since 2014)
- **Member** of the Women's Transportation Seminar (WTS) International (since 2013)
- **Affiliate member** of the National Postdoctoral Association (NPA) (2013-2014)
- **Member** of the TRB Standing Committee on Highway Capacity and Quality of Service ACH40 (since 2016)
- **Substitute member** of the Management Committee of the COST Action TU0903 – MULTITUDE (Methods and tools for supporting the use calibration and validation of traffic simulation models) (2011-2013)
- **Member** of the Traffic and Parking Committee of the Hellenic Institute of Transportation Engineers (2010-2012)
- **Member** of the Hellenic Institute of Transportation Engineers (since 2009)
- **Member** of the Chi Epsilon Honor Society (since 2006)
- **Member** of Technical Chamber of Greece – Registered Rural and Surveying Engineer (since 2003)

## SERVICE TO THE CEAE DEPARTMENT (KU)

- Faculty search committee, member (Assistant Professor in Architectural Engineering) (2023-2024)
- Diversity, equity, and inclusion task force, member (2020-2022)
- ABET committee, member (since 2019)
- Faculty search committee, member (Assistant Professor in Construction Safety) (2019-2020)
- Graduate studies committee, member (since 2019).
- Sabbatical committee, member (2019, 2022).
- KU STEM Analytics working group, member (since 2017).
- Undergraduate recruiting committee, member (2014-present); chair (2020-2022).
- Undergraduate retention committee, member (since 2015).
- Professional Development Series (2016).

## SERVICE TO THE SCHOOL OF ENGINEERING (KU)

- Diversity and Inclusion Task Force (2019)
- KUEST ONE presentations (2019, 2020)
- Order of the Engineer Ceremony (December 2017).
- Fundamentals of Engineering Exam Review Series, Lecturer (2017)
- Interviewer for the Self Fellowship at the School of Engineering (2015, 2017, 2018, 2019).
- Panel member of the Academic Misconduct Hearing for H. An (April 2017).

## SERVICE TO THE UNIVERSITY OF KANSAS

- Research GO review panel member, 2022.
- Research Rising white papers panel member, 2021.
- Graduate Teaching Assistants Follow-Up Sessions "Teaching as a Grader". KU Center for Teaching Excellence, September 2016.

## REVIEW ACTIVITIES

### Journal Reviews

- **Applied Ergonomics**
- **ASCE** – Journal of Transportation Engineering Part A: Systems
- **CACIE** Journal
- **Frontiers in Future Transportation**
- **ICE Transport**
- **IEEE** – ITS Transactions
- **IET Intelligent Transport Systems**
- **International Journal of Human-Computer Interaction**
- **Journal of Advanced Transportation**
- **Transportation Letters** – the International Journal of Transportation Research
- **Transportation Research Part C** – Emerging Technologies
- **Transportmetrica A** – Transport Science
- **Travel Behaviour and Society Journal**
- **ATS** – Advances in Transportation Studies
- **TRR** – Transportation Research Record Journal of the Transportation Research Board

### Panel Reviews

- **Panel Member** for the National Science Foundation ENG Directorate: Smart and Connected Communities (S&CC) (January 2019); Division of Engineering Education Centers (February 2022); M3X CAREER proposals (November 2023).
- **Panel Member** for the National Science Foundation Graduate Research Fellowship Program (GRFP), (December 2021 – January 2022).
- **Panel Member** for the Israeli Smart Transportation Research Center (ISTRC) (April 2021)
- **Panel Member** for the Horizon 2020 Program of the European Commission (February 13-20, 2020; September 12-16, 2020; November 25 – December 6, 2021)
- **Panel Member** for the National Science Foundation, Computer and Network Systems (CNS) Division (February 20-21, 2020)

- **Panel Member** for the National Defense Science and Engineering Graduate (NDSEG) Fellowship, from the Department of Defense and the American Society for Engineering Education (2016, 2017, 2018).

## EDITOR ACTIVITIES

- **Senior Editor** for IEEE Transactions on Intelligent Transportation Systems (since 2023) (IF = 8.5)
- **Associate Editor** for Transportation Letters – The International Journal of Transportation Research, Taylor and Francis Group (since 2023) (IF = 2.8)
- **Handling Editor** for Transportation Research Record, Sage publications (since 2020) (IF = 1.7)
- **Editorial Board Member** for Transportation Letters – The International Journal of Transportation Research, Taylor and Francis Group (since 2019)
- **Editorial Board Member** for Journal of Advanced Transportation, Hindawi (2020-2022)
- **Guest Editor** for Special Issue in Journal of Traffic and Transportation Engineering (English Edition) on "Driver Behavior, Highway Capacity and Transportation Research" (2016).

## CONFERENCE ACTIVITIES

- **Session Chair:** Road Safety and Simulation (RSS) Conference, Athens, Greece, June, 2022.
- **Scientific Committee Member:** Road Safety and Simulation (RSS) Conference, Iowa City, Iowa, October, 2019.

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- **Paper Reviewer:** 2018 IEEE 21st International Conference on Intelligent Transportation Systems, Maui, Hawaii, November 2018.
- **Scientific Committee Member**: 8th International Congress on Transportation Research (ICTR), Thessaloniki, Greece, September 2017.
- **Session Chair:** International Symposium on Enhancing Highway Performance (ISEHP) 2016, Berlin, June 2016.
- **Paper Reviewer:** 2015 IEEE 18th International Conference on Intelligent Transportation Systems, 2015.
- **Session Chair:** 2nd International Conference on Connected Vehicles & Expo (ICCVE 2013), Las Vegas, NV, December 2013.
- **Paper Reviewer:** ICTR 2013 – 6th International Congress in Transportation Research Conference, 2013.
- **Paper Reviewer:** ICCTP – 11th International Conference of Chinese Transportation Professionals, August 2011.
- **Organizing Committee:** Conference on Transportation Issues of Municipalities of the Attica Region, sponsored by the Hellenic Institute of Transportation Engineers, Athens, Greece, February, 2011.
- **Paper Reviewer:** TRB – Annual Meeting (Traffic Flow Theory and Characteristics Committee, Highway Capacity and Quality of Service Committee, Freeway Operations Committee).