CURRICULUM VITAE

1. Biographical Information

Min-Wook Kang, Ph.D., P.E.
Professor
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2. Education

• Ph.D.	Civil & Environmental Engineering	Univ. of Maryland, College Park, MD	2003–2008
• M.S.	Civil & Environmental Engineering	Univ. of Maryland, College Park, MD	2003–2007
• M.S.	Transportation System Engineering	Hanyang Univ., South Korea	2001–2003
• B.S.	Transportation System Engineering	Hanyang Univ., South Korea	1994–2001

3. Appointments & Practices

- Professor, Dept of Civil, Coastal & Env. Eng., University of South Alabama 8/2022–Pre
- Grad Coordinator, Dept of Civil, Coastal & Env. Eng., U of South Alabama 5/2021–Pre
- Full Member, Graduate School, University of South Alabama 12/2017–Pre
- Associate Professor, Dept of Civil, Coastal & Env. Eng., U of South Alabama 8/2018–8/2022
- Assistant Professor, University of South Alabama 1/2012–8/2018
- Associate Member, Graduate School, University of South Alabama 2/2012–12/2017
- Research Associate/Adjunct Professor, Morgan State University 1/2010–12/2011
- Senior Research Scientist, ATRC, Inc. 9/2008–1/2010
- Transportation Engineer, Brudis & Associates Inc. (BAI) 1/2008–9/2008
- Grad. Research Assist., National Center for Smart Growth Research & Edu. 8/2007–1/2008
- Grad. Research Assist., University of Maryland, College Park, MD 9/2003–8/2007
- Research Assistant, Korea Transport Institute, South Korea 5/2003–7/2003
- Graduate Research Assistant, Hanyang University, South Korea 3/2001–2/2003
- Undergrad. Research Assistant, Hanyang University, South Korea 3/2000–2/2001
- Active Duty, Korea Air Force, South Korea 10/1995–4/1998

4. Research Areas of Interest

- Advanced traffic operations and data analysis
- Traffic safety analysis and modeling
- Driver behavior studies: red-light running, dilemma zone, distracted/fatigued driving, etc.
- Traffic signal design and coordination
- Artificial intelligence in traffic management and transportation infrastructure design
- Application of GIS for transportation problems

5. Professional Certification & Licenses

Professional Engineer (P.E.), No. 37343, Maryland 2011–Pre

6. Research Projects

6.1 Funded Projects

1. Cleary J. (PI), Wu, S. (PI), and **Kang, M.-W.** (co-PI), “Planning: IUSE/PFE: RED Planning: Strengthening Next-Generation Civil Engineers in the Gulf Coast Region,” Sponsored by National Science Foundation, Award Number (FAIN): 2624460, **$149,997**, Aug. 15, 2026 – July 31, 2028.
2. **Kang, M.-W.** (PI) and Wu, S. (co-PI), “Engineering Solutions for Red-Light Running Safety at Urban High- Speed Intersections, Utilizing Existing Resources,” Sponsored by Alabama Department of Transportation, **$260,747**, June 2026 – Dec. 2028.
3. Wu, S. (PI), **Kang, M.-W.** (co-PI), and Cleary J. (co-PI) “Optimizing Concrete Truck Delivery Timing: Investigating Proper Transit and Placement Windows for Ready-Mix Concrete,” Sponsored by Alabama Department of Transportation, **$261,241**, May 2026 – April 2028.
4. **Kang, M.-W.** (PI) and Wu, S. (co-PI), “Safety Assessment of Dilemma Zone Protection (DZP) Systems: CMF Development and Before/After Crash Analysis Using Empirical Bayes Method,” Sponsored by Alabama Department of Transportation, **$100,000**, May 2025 – Sep. 2026.
5. Wu, S. (PI), **Kang, M.-W.** (co-PI), Cleary, J. (co-PI), Lisa LaCross (co-PI), “Integrating Standard Education in Civil Engineering Materials Curriculum”, Sponsored by National Institute of Standards and Technology (NIST), **$144,528**. Oct. 2023 – Oct. 2026.
6. Wu, S. (PI), Venkiteshwaran, K. (co-PI), Wang, J. (co-PI), Stenson, A. (co-PI), **Kang, M.-W.** (co-PI), Cleary, J. (co-PI), and Dizbay-Onat, M. (co-PI), “Gulf Coast - Center for Addressing Microplastics Pollution (GC-CAMP): Understanding, Mitigation and Prevention of Waste Plastic Marine Debris in the Gulf Coast”, Sponsored by National Oceanic and Atmospheric Administration (NOAA) and Mississippi-Alabama Sea Grant, **$1,910,628** (Inflation Reduction Act), April 2023 – April 2026
7. Wu, S. (PI), **Kang, M.-W.** (co-PI), and Cleary, J. (co-PI), “Review and Evaluation of Concrete Pavement Design Method in Alabama,” Alabama Department of Transportation, **$200,943**, May 2024 – Dec. 2025.
8. **Kang, M.-W**. **(PI)**, “Dynamic Red Protection (DRP) Systems – Alabama Pilot Study: Implementation and Safety Assessment of DRP Systems at Selected Signalized Intersections”, Sponsored by USDOT and ALDOT, **$222,596**. May 2022 – Oct. 2026
9. **Kang, M.-W. (PI)**, “Dilemma Zone Protection (DZP) Systems – Alabama Pilot Study: Implementation of DZP Systems at Seven Predetermined High-Speed, High-Risk Signalized Intersections in Rural Alabama” Sponsored by USDOT and ALDOT, **$220,026**; June 6, 2019 – December 31, 2022.
10. **Kang, M.-W. (PI)** and Jones, Steven (Co-PI @ UA) “Flashing Yellow Arrow Left Turn Phasing by Time-of-Day Development of Design and Operational Guidelines,” Sponsored by USDOT and ALDOT, **$199,908**; May 2019 – April 2022.
11. **Kang, M.-W. (PI)**, “Dilemma Zone Protection (DZP) Systems for Rural High-Speed, High Risk Signalized Intersections in Alabama: Optimizing DZP Boundaries and System Assessment,” Sponsored by USDOT and ALDOT, **$176,430**; January 2017 – January 2022.
12. Benton, R. G. (PI), Shropshire, J. D. (Co-PI), Glisson, W. B. (Co- PI), Kang, M. W., Langley, R., Gillespie, M., Johnsten, T., Sobol, R., Wang, B., Borchert, G. M., Pastukh, V., Leavesley, S. J., Rich, T., Lahtinen, K. D., Chow, A., "MRI: Acquisition of Adaptive Cluster for Performance and Forensics Analysis of Distributed Machine Learning," Sponsored by National Science Foundation, External to the University, **$115,100**. (October 1, 2017 - September 30, 2020).

13. **Kang, M.-W. (PI @ USA)**, Lamondia, J. (PI @ Auburn), and Mike Anderson (PI @ UAH) "Development of a Roadway Congestion/Safety Improvement Tool based on the Surrogate Safety Assessment Model (SSAM)," Sponsored by USDOT and ALDOT, **$300,000** (Kang's share: **$100,000**); Aug. 2015 – Aug. 2019. Note: Additional funding (**$18,400**) from the USA Graduate School for 2 years of tuition support for a graduate research assistant.
14. **Kang, M.-W. (PI)**, "A Safety Study of Alabama Highways – Reducing Crashes Caused by Drowsy Driving: Focusing on Drowsy Driving Warning Signs & Roadside Rest Area Signs," Sponsored by USDOT and ALDOT, **$208,798**. April 24, 2013 - July 31, 2015. Note: Additional funding (**$8,006**) from the USA Civil Engineering Department to support a graduate research assistant.
15. **Kang, M.-W. (Mentor)**, Caldwell, T., "*Assessing USA Campus Parking Management*," Sponsored by UCUR - University of South Alabama, **$2,000**. April 2014 - June 2014.
16. **Kang, M.-W. (Mentor)**, Noland, T., "*Assessing Traffic Delay and Pedestrian Safety Risk of USA Main Campus*," Sponsored by UCUR - University of South Alabama, **$2,388**. Apr 2014 – May 2014.
17. **Kang, M.-W. (Mentor)**, Corliss, D., "*Feasibility of Roundabout Implementation at the Intersection of USA Drive N. and Health Services Drive, Using Microscopic Traffic Simulation Approaches*," Sponsored by UCUR - University of South Alabama, **$2,500**. April 2013 - Oct 2013.
18. **Kang, M.-W. (PI)**, Schonfeld, P. (Co-PI), Jha, M. (Co-PI) "Alternative Alignments Development and Evaluation for the US 220," Sponsored by State Highway Administration (SHA) of Maryland DOT, **$45,000**. Oct. 2010 - April 2011.

6.2 Pending

1. Wu, S. (PI), Cleary, J (co-PI), **Kang, M.-W.** (co-PI), Phan, A.-V. (co-PI), Walker, S. (co-PI), Venkiteshwaran, K. (co-PI), and Lohar, B. (co-PI), "*Gulf Coast Industrial Training and Assessment Center (GC-ITAC),*" US Department of Energy - DOE, $2,341,964, Jan. 1, 2027 – Dec. 31, 2031.
2. Wu, S. (PI), Patch, S. (co-PI), **Kang, M.-W.** (co-PI), Cleary, J (co-PI), and Do, T. (co-PI), "*COAST-AL Resilience Academy: Empowering Alabama Youth and Teachers to Build Flood-Resilient Communities Through Local Action*," National Academies of Sciences, Engineering and Medicine - NASEM, $749,866, Nov. 1, 2026 – Oct. 31, 2029.
3. Wu, S. (PI), Venkiteshwaran, K. (co-PI), **Kang, M.-W.** (co-PI), Wang, W. (co-PI), Stenson, A. (co-PI), Confer, M. (co-PI), Cleary, J (co-PI), and Henning, j. (co-PI), "*Proactive Pipeline Protection: Predictive Soil-Agent Transport Modeling and Adaptive Mitigation Strategies for the Gulf Coast Region*," US Department of Transportation, $1,250,000, Jan. 1, 2027 – Dec. 31, 2027.

7. Publications

7.1 Refereed Journal Articles (37) (graduate student*; corresponding author‡)

1. Wu‡, S., Oyelere*, Karim, S., Neupane, P., **Kang**, M.-W., Cleary, J., and LaCross, L. (Accepted). Enhancing Civil Engineering Curriculum through Standards-Based Education: Student Perceptions and Implementation Strategies, *ASCE – Journal of Civil Engineering Education*.
2. Hossain*, R. and **Kang**‡, M.-W. (In Press). The Impact of Detection Zone Length on Continuous-Wide-Area (CWA) Detector-Based Dilemma Zone Protection at Signalized Intersections*, Journal of Traffic and Transportation Engineering* – Elsevier.
3. Hossain*, R. and **Kang**‡, M.-W. (2026). Leveraging Generative Adversarial Networks (GANs) for Improved Red Light Running Crash Severity Modelling*, Transportation Research Record: Journal of Transportation Research Board, 0(0).* https://doi.org/10.1177/03611981261493934
4. Wu‡, S., Oyelere*, Karim, S., **Kang**, M.-W., Cleary, J., Cotton, C. and Srinivasan, K. (2026). Case Study on Rejuvenated Cold Mix Asphalt: Construction and Performance in Pavement Overlays, *Journal of Transportation Engineering, Part B: Pavements, 153(1)*. https://doi.org/10.1061/JPEODX.PVENG-2182
5. Hossain*, R., **Kang**‡, M.-W., Rahman, N., Biswas, P., and Rahman, M. (2026). Safety Evaluation of Dilemma Zone Protection System for Rural, High-Speed Signalized Intersections Using Empirical Bayes Method *Transportation Research Record: Journal of the Transportation Research Board, 2680 (3), 712-724.* https://doi.org/10.1177/03611981251368817.
6. **Kang**‡, M.-W., Hossain*, R., Rahman, M., and Biswas, P. (2025). Speed–Space Analysis and Dynamic All-Red Extension for Red-Light Running Protection at Signalized Intersections on Rural High-Speed Arterials. *Transportation Research Record: Journal of the Transportation Research Board, 2679(6)*, 105-119. https://doi.org/10.1177/03611981241312214
7. Hossain*, M.R., **Kang**‡, M.-W., and Wu, S. (2025) Engineering Countermeasures for Red-Light Running: A State-of-the-Art Review, for publication in the *Journal of Transportation Technologies*. 15(2). https://doi.org/10.4236/jtts.2025.152014
8. Oyelere*, A., Wu‡, S. Hsiao, K.-T., **Kang**, M.-W. Dizbay-Onat, M., Cleary, J., Venkiteshwaran, K., Wang, J., Bao, Y. (2024). Evaluation of cracking susceptibility of asphalt binders modified with recycled high-density polyethylene and polypropylene microplastics, Construction and Building Materials, Vol. 438, 136811. https://doi.org/10.1016/j.conbuildmat.2024.136811.
9. Biswas*, P., **Kang**‡, M.-W., Hossain*, M.R., and Rahman*, M. (2024). Field Assessment of Variable Left-Turn Mode by Time-of-Day for Intersections Being Upgraded with Flashing Yellow Arrow Signal Heads and Offset Left-Turn Lanes, *Transportation Research Record, 2678(10): Journal of Transportation Research Board.* https://doi.org/10.1177/0361198124123522
10. Biswas*, P., **Kang**‡, M.-W. and Rahman*, M. (2024). Safety Evaluation of the Combined Effect of Offset Left-Turn Lanes and FYA Signals at Signalized Intersections on Multilane Divided Highways in Alabama using the Empirical Bayes Method, *Transportation Research Record, 2678(8): Journal of Transportation Research Board.* https://doi.org/10.1177/03611981231213076
11. Jagirdar*, R., Lee‡, J., Besenski, D., **Kang**, M.-W., Pathak, C. (2023). Development and Evaluation of Intersection-Based Turning Movement Counts Framework Using Two Channel LiDAR Sensors, *Journal of Transportation Technologies*, Vol. 13, No. 4. DOI: 10.4236/jtts.2023.134024
12. Rahman*, M., **Kang**‡, M.-W., and Biswas*, P. (2023). Dynamic dilemma zone protection system for high-speed signalized intersections: A comprehensive safety - operational assessment, *Transportation Engineering*, Vol. 12, 100174, Elsevier. ISSN 2666-691X. https://doi.org/10.1016/j.treng.2023.100174.
13. Biswas*, P., **Kang**‡, M.-W. and Rahman*, M. (2022). Machine Learning-based Automated Left-Turn Vehicle Counts with Conventional Presence-Mode Long-Loop Detectors: Alabama Case

Studies, *Transportation Research Record: Journal of Transportation Research Board,* https://doi.org/10.1177/03611981221090519

14. Rahman*, M., **Kang**‡, M.-W., and Biswas*, P. (2021). Time-Varying, Speed-Varying Dilemma Zones using Machine Learning and Continuous Vehicle Tracking, *Transportation Research Part C – Emerging Technologies, Elsevier*, Vol. 130. https://doi.org/10.1016/j.trc.2021.103310
15. Rahman*, M. and **Kang**‡, M.-W. (2021), Analysis of Intersection Site-Specific Characteristics for Type II Dilemma Zone Determination. *Journal of Transportation Engineering, Part A: Systems.* Vol. 147, Issue 11. https://doi.org/10.1061/JTEPBS.0000578
16. Rahman*, M., **Kang**‡, M.-W. (2020), Safety Evaluation of Drowsy Driving Advisory System: Alabama Case Study. J*ournal of Safety Research*, Vol. 74, pp. 45-53. https://doi.org/10.1016/j.jsr.2020.04.005
17. **Kang**‡, M.-W., Rahman*, M., Lee, J. (2020), Determination and Utilization of Dilemma Zone Length and Location for Safety Assessment of Rural High-Speed Signalized Intersections. *Transportation Research Record: Journal of the Transportation Research Board*, Vol 2674, Issue 4, pp. 1-9 https://doi.org/10.1177/0361198120911929
18. Jagirdar*, R., Lee‡, J., Kim, K., and **Kang**, M.-W. (2019), Development and Evaluation of Traffic Count Sensor using Low-Cost LiDAR and Continuous Wavelet Transform: Initial Results, *Transportation Research Record: Journal of Transportation Research Board.* Vol: 2673, Issue 11, pp. 209-219, https://doi.org/10.1177/0361198119853564
19. Mahbub*, M., **Kang**‡, M.-W. and Lee, J. (2019), Protected–Permissive Left Turn Phasing with Flashing Yellow Arrow Signal: Study of Red Intervals for an Effective Phase Transition, *Canadian Journal of Civil Engineering*, Canadian Science Publishing. Vol. 46, Issue 8, pp. 732-741. https://doi.org/10.1139/cjce-2018-0381
20. **Kang**‡, M.-W. and Momtaz*, S. (2018), Assessment of Driver Compliance on Roadside Safety Signs with Warning Sounds from Road Surface - A Driving Simulator Study, *Journal of Traffic and Transportation Engineering* – Elsevier, Vol. 5, Issue 1, pp. 1-13. https://doi.org/10.1016/j.jtte.2017.09.001
21. **Kang**‡, M.-W., Momtaz*, S., and Barnett, T. (2015), Crash Analysis and Public Survey for Drowsy Driving Advisory Systems, *Journal of Transportation Engineering*, Vol. 141, Issue 9. https://doi.org/10.1061/(ASCE)TE.1943-5436.0000777
22. Kim, E., Jha‡, M.K., and **Kang**, M.-W. (2015). A Sensitivity Analysis of Critical Genetic Algorithm Parameters: Highway Alignment Optimization Case Study, *International Journal of Operations Research and Information Systems.* Vol. 6, Issue 1, pp. 30-48. https://doi.org/10.4018/ijoris.2015010103
23. Yang*, N., **Kang**‡, M.-W., Schonfeld, P., and Jha, M.K. (2014) Multi-objective Highway Alignment Optimization Incorporating Preference Information, *Transportation Research Part C – Emerging Technology*, Vol. 40, March 2014, pp. 36-48. https://doi.org/10.1016/j.trc.2013.12.010
24. **Kang**‡, M.-W., Jha, M.K., and Buddharaju*, R. (2014), A Rail Transit Route Optimization Model for Rail Infrastructure Planning and Design: Case Study of St Andrews, Scotland, *Journal of Transportation Engineering – ASCE*, Vol. 140, No. 1, pp. 1-11. https://doi.org/10.1061/(ASCE)TE.1943-5436.0000445
25. Mishra‡, S., **Kang**, M.-W., and Jha, M.K. (2014). An Empirical Model with Environmental Considerations in Highway Alignment Optimization, *Journal of Infrastructure Systems*, Vol. 20, No. 4, pp. 1-12. https://doi.org/10.1061/(ASCE)IS.1943-555X.0000194
26. **Kang**‡, M.-W. Shariat*, S., and Jha, M.K. (2013), New Highway Geometric Design Methods for Minimizing Vehicular Fuel Consumption and Improving Safety, *Transportation Research Part C – Emerging Technology*, Vol. 31, June 2013, pp. 99-111. https://doi.org/10.1016/j.trc.2013.03.002
27. **Kang**‡**,** M.-W., Jha, M.K., and Schonfeld, P. (2012), Applicability of Highway Alignment

Optimization Models, *Transportation Research Part C – Emerging Technology*, Vol. 21, Issue 1, pp. 257-286. https://doi.org/10.1016/j.trc.2011.09.006

28. **Kang**‡, M.-W., Jha, M.K., and Hwang, D. (2011), A GIS-Based Simulation Model for Military Path Planning of Unmanned Ground Robots, *International Journal of Safety and Security Engineering*, Vol. 1, No. 3, pp. 248-264. DOI: 10.2495/SAFE-V1-N3-248-264.
29. **Kang**‡**,** M.-W., Yang, N., Schonfeld, P., and Jha, M.K. (2010), Bilevel Highway Route Optimization, *Transportation Research Record: Journal of the Transportation Research Board, No. 2197*, National Academies of Sciences, Engineering, and Medicine, pp.107-117. https://doi.org/10.3141/2197-13
30. **Kang**‡**,** M.-W., Schonfeld, P., and Yang, N. (2009), Prescreening and Repairing in a Genetic Algorithm for Highway Alignment Optimization, *Computer-Aided Civil and Infrastructure Engineering,* Vol. 24, No. 2, pp. 109-119. https://doi.org/10.1111/j.1467-8667.2008.00574.x
31. Jha‡, M.K. and **Kang,** M.-W. (2009), GIS-Based Model for Highway Noise Analysis, *Journal of Infrastructure Systems-ASCE*, Vol. 15, No. 2, pp. 88-94. https://doi.org/10.1061/(ASCE)1076-0342(2009)15:2(88)
32. Yang‡, N., Schonfeld, P., and **Kang**, M.-W. (2009), A Hybrid Methodology for Freeway Work Zone Optimization with Time Constraints, *Public Works Management & Policy*, Vol. 13, No. 3, pp. 253-264. https://doi.org/10.1177/1087724X08322843
33. **Kang**‡**,** M.-W., Schonfeld, P., and Jong, J.-C. (2007), Highway Alignment Optimization through Feasible Gates, *Journal of Advanced Transportation,* Vol. 41, No. 2, pp. 115-144. https://doi.org/10.1002/atr.5670410202
34. Jha‡**,** M.K., Davis, C., and **Kang,** M.-W. (2007), State-of-the-art Intelligent Road Design Model with Genetic Algorithms, Geographic Information Systems, and CADD, *Advances in Transportation Studies-An International Journal, Section A*, Issue 13, pp. 41-52.
35. **Kang**‡, M.-W., Son, B., and Doh, T.W. (2003), Development of A Dividing Method and Accident Estimation Models for Highway Horizontal Curve Sections Based on Geometric Characteristics*, Journal of Eastern Asia Society for Transportation Studies*, Vol. 5, pp. 2695-2707.
36. **Kang**‡, M.-W., Son, B., and Doh, T.W. (2002), Development of Accident Prediction Models Based on Roadway Geometric Characteristics at Freeway Curve Sections, *Journal of The Korean Society of Civil Engineers*, Vol. 22, No. 6-D, pp.1077-1088.
37. **Kang**‡, M.-W., Doh, T.W., and Son, B. (2002), Fitting Distribution of Accident Frequency of Freeway Horizontal Curve Section & Development of Negative Binomial Regression Model, *Journal of Korean Society of Transportation*, Vol. 20, No. 7, pp. 197-204.

7.2 Manuscripts Under Review (1) (graduate student*; corresponding author‡)

1. Wu‡, S., Oyelere*, A., Kang, M.-W., Cleary, J., Walker, S. (under review). Artificial Intelligence and Machine Learning in Asphalt Materials Engineering: A Bibliometric Analysis and Critical Review of Material Design and Property Prediction, ASCE – Journal of Materials in Civil Engineering.

7.3 Book & Referred Book Chapters (5) (graduate student*; corresponding author‡)

1. *"Artificial Intelligence in Highway Location and Alignment Optimization"* by **Kang**, M.-W. and Schonfeld, P. (University of Maryland, College Park) | https://doi.org/10.1142/11059 | Sep. 2020 | Total Pages: 288 | Publisher: World Scientific Publishing
2. Corliss*, D. and **Kang**‡**,** M.-W. (2013), Roundabout Feasibility for Improving a University Campus Intersection, Using Microscopic Traffic Simulation Approaches, In *Recent Research in Urban Sustainability, Architecture and Structures, O.* Owolabi and M. Jha (ed.), ISBN: 978-960-474-331-5, pp. 58-65, WSEAS Press.

3. Jha‡, M.K., Djiki, B., **Kang**, M.-W., and Kim, E. (2013), Cost-Benefit Analysis in Applying Design Flexibility and Context Sensitive Solutions: A Case Study of Alternative Alignment of MD 43 Extension, in *Highways: Construction, Management, and Maintenance,* Samantha R. Jones (ed.), ISBN: 978-1-61728-862-3, pp. 133-147, Nova Science Publishers, Inc.
4. **Kang**‡, M.-W., Jha, M.K. and Karri, G. (2010) Determination of Robot Drop Locations for Military Path Planning Using GIS Application, In *Recent Advances in Computer Engineering and Applications,* S. Lagakos, L. Perlovsky, M. Jha, B. Covaci, A. Zaharim, N. Mastorakis (eds.), ISBN: 978-960-474-151-9, pp. 194-200, WSEAS Press.
5. Jha, M.K., Karri‡, G., and **Kang**, M.-W. (2010), A Military Path Planning Algorithm Using Visualization and Dynamic GIS, In *Recent Advances in Computer Engineering and Applications,* S. Lagakos, L. Perlovsky, M. Jha, B. Covaci, A. Zaharim, N. Mastorakis (eds.), ISBN: 978-960-474-151-9, pp. 188-193, WSEAS Press.

7.4 Refereed Conf. Proceedings or Extended Abstract (19) (grad student*; corresponding author‡)

1. Oyelere*, A., Karim*, S., Wu‡, S., **Kang**, M.-W., Cleary, J., Cotton, C., and Srinivasan, K. (2025). *Constructability and Performance of 100% RAP Asphalt Mixtures Overlay Paving.* Paper ID #2248140, 2026 ASCE T&DI Transportation Conference, June 28-July 1, Detroit, Michigan.
2. Wu‡, S., **Kang**, M.-W., and Cleary, J. (2025). *Case Study of Integrating Standards, Codes, and Specifications into Engineering Curricula: Various Pathways to Professional Readiness.* Paper ID #45501, 2025 ASEE Annual Conference, June 22-25, Montreal, Canada. https://peer.asee.org/56062
3. Wu‡, S., **Kang**, M.-W., Cleary, J., and L. LaCross. (2025). *Fast-Track to Research Writing Mastery: A 9-Week Intensive Course for Graduate Students*. Paper ID #45500, 2025 ASEE Southeast Conference, March 9-11, Mississippi State University, Mississippi. https://peer.asee.org/54169.
4. **Kang**‡, M.-W. and Rahman*, M.M. (2019), Drowsy Driving Advisory System: Alabama Case Study. *98th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 19-03502.
5. Mahbub*, M., **Kang**‡, M.-W. and Lee, J. (2019), Determining Length of Red Intervals for Effective Protected-Permissive Left Turn Phase Operation with Flashing Yellow Arrow Signal, *98th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 19-00205
6. Jagirdar*, R., Lee, J., Kim, K., and **Kang**‡, M.-W. (2019), Development and Evaluation of Traffic Count Sensor using Low-Cost LiDAR and Continuous Wavelet Transform, In *Proceedings of 98th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 19-03050
7. Momtaz*, S. and **Kang**‡, M.-W. (2017). Auditory Warning Signals: Improving Driver Compliance to Roadside Safety Signs, In *Proceedings of 2017 Road Safety & Simulation Conference (RSS2017)*, Paper No. 116.
8. **Kang**‡, M.-W. and Schonfeld, P. (2017), Analysis of Seasonal Variation of Upper Mississippi River Towboat Traffic, In *Proceedings of 96th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 17-02212
9. Mishra‡, S., **Kang**, M.-W., and Jha, M.K. (2014), A Tri-Level Model with Environmental Considerations in Highway Alignment Optimization, In *Proceedings of 93rd Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 14-0376.
10. Jha‡, M.K., **Kang**, M.-W., Mishra, S., Samanta*, S., and Lyons*, N. (2014), Urban Rail Transit Planning and Design: Discussion of Practical Issues and Analytical Modeling Techniques, In *Proceedings of 93rd Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 14-5309.
11. Buddharaju*, R., Jha‡, M.K., **Kang,** M.-W., Mishra, S., and Ponnada, M. (2013), Predicting Road Accidents and Prioritizing Road Safety Improvement Measures in India Using Adapted Traffic Conflict

Techniques, In *Proceedings of 92nd Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 13-5157.

12. **Kang‡,** M.-W., Jha, M.K., and R. Buddharaju*. (2012), A Rail Transit Route Optimization Model for Rail Infrastructure Planning and Design: Case Study of St Andrews, Scotland, In *Proceedings of 91st Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 12-2060.
13. **Kang**‡, M.-W., Wang, S., Jha, M.K., Chen*, C.-C., and Schonfeld, P. (2011), A Simulation Framework for the Path Planning of Unmanned Autonomous Systems, In *Proceedings of Vulnerability, Uncertainty, and Risk: Analysis, Modeling, and Management,* B. Ayyub (ed.), ISBN: 9780784411704, pp. 129-137.
14. **Kang‡,** M.-W., Yang, N., Schonfeld, P. and Jha, M.K. (2010) Bi-Level Highway Route Optimization, In *Proceedings of 89th Annual Meeting of T Transportation Research Board of National Academies of Sciences*, Paper No. 10-1330.
15. Yang‡, N., **Kang**, M.-W., Schonfeld, P., and Jha, M.K. (2010) Multiple Objective Optimization of Highway Alignments Incorporating Preference Information, In *Proceedings of 89th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 10-1128
16. Burnier, C., Clifton‡, K.J., Huang, S., **Kang**, M.-W., and Schneider, R. (2008) A Meso-Scale Model of Pedestrian Demand, In *Proceedings of ACSP-AESOP 4th Joint Congress*
17. **Kang**‡, M.-W., Jha, M.K., and Schonfeld, P. (2006) Three-Dimensional Highway Alignment Optimization for Brookeville Bypass, In *Proceedings of 85th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 06-1023
18. **Kang‡,** M.-W., Kim, T., and Doh, T.W. (2005) A New Methodology to Determine Length of Highway Horizontal Curve Sections for Accident Estimation Model, In *Proceedings of 84th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Paper No. 05-2691
19. **Kang**‡, M.-W. and Doh, T.W. (2001) Optimization Strategy with External Metering on Urban Network: A Simulation Study, In *Proceedings of 50th Korean Society of Civil Engineers Annual Conference*, pp. 131-134.

7.5 Technical Reports (22) (graduate student*)

1. Kang, M.-W. and Rahman*, M. (2026). Implementation and Safety Assessment of DARE Systems at Selected High Speed Signalized Intersections: Dynamic All-Red Extension (DARE) - Alabama Pilot Study, Final Report (SPR-0001(065)) prepared for Alabama Department of Transportation, University of South Alabama.
2. Wu, S., **Kang**, M.-W., Cleary, J., Gautam*, A., and Chaudary*, P. (2025), Review and Evaluation of Concrete Pavement Design Method in Alabama. Final Report (931-107R) prepared for Alabama Department of Transportation, University of South Alabama.
3. **Kang**, M.-W. and Rahman*, M. (2022). Dilemma Zone Protection Systems: Characterizing Driver Behavior and Optimizing DZP Boundaries, Final Report (930-937) prepared for Alabama Department of Transportation, University of South Alabama.
4. **Kang**, M.-W. Biswas*, P. and Jones, S. (2022). Flashing Yellow Arrow Left Turn Phasing by Time-of-Day Development of Design and Operational Guidelines, Final Report (930-980) prepared for Alabama Department of Transportation, University of South Alabama.
5. **Kang**, M.-W., Rahman* (2021). Dilemma Zone Protection System – Implementation and Operation Guideline, prepared for Alabama Department of Transportation, University of South Alabama.
6. Lamondia, J. and **Kang**, M.-W. (2020). Development of a Roadway Congestion/Safety Improvement Tool based on the Surrogate Safety Assessment Model (SSAM), Final Report prepared for Alabama Department of Transportation, Research Project No: HSIP-68515(250), University of South Alabama.

7. **Kang**, M.-W., Momtaz*, S. (2016). A Safety Study of Alabama Highways – Reducing Crashes Caused by Drowsy Driving: Focusing on Drowsy Driving Warning Signs & Roadside Rest Area Signs. Final Report prepared for Alabama Department of Transportation, Research Project No: 930-856R, University of South Alabama.
8. Corliss, D. and **Kang,** M.-W. (2013), *Feasibility of Roundabout Implementation at the Intersection of USA Drive N and Health Service Drive, Using Analytical and Microscopic Traffic Simulation Approaches*, USA UCUR Summer Undergraduate Research Program. Mobile, AL.
9. **Kang**, M.-W., Jha, M.K. and Schonfeld, P. *Alternative Alignments Development and Evaluation for the US 220 Project in Maryland*. Final Report for Maryland State Highway Administration, MD-11-SP009B49, Maryland Department of Transportation, June 2011.
10. **Kang**, M.-W., Jha, M.K., and Hwang, D., *A GIS-Based Simulation Model for Positioning & Routing Unmanned Ground Vehicles*, Part I – Phase II Final Report of Software-Simulated Test and Evaluation of Military Missions Using Positioning and Routing Algorithms, Submitted to Test & Evaluation/Science and Technology (T&E/S&T), Test resource Management Center (TRMC), US. Department of Defense, June 2010.
11. **Kang**, M.-W., Yang, N., Schonfeld, P., and Jha, M.K. A *MultiObjective Bilevel Approach to Highway Alignment Optimization*. Phase-IB Final Report for U.S. National Science Foundation (NSF) STTR Program, NSF-STTR-074098, July 2009.
12. **Kang**, M.-W., Yang, N., Schonfeld, P., and Jha, M.K*. A MultiObjective Bilevel Approach to Highway Alignment Optimization*. Phase-I Final Report for U.S. National Science Foundation (NSF) STTR Program, NSF-STTR-074098, January 2009.
13. Giering, G., Xiao, Q., **Kang**, M.-W., and Warren, D. *Engineering Countermeasures for Reducing Speeds*: *A Desktop Reference of Potential Effectiveness*, Prepared for FHWA Office of Safety, May 2009.
14. **Kang**, M.-W. *An Alignment Optimization Model for A Simple Highway Network*. Ph.D. Dissertation, University of Maryland, College Park, May 2008
15. Giering, G. and **Kang**, M.-W. *Feasibility Study for Widening of MD State Highway 272*. Final Report for Maryland State Highway Administration, Maryland Dept of Transportation (MDOT), 2008.
16. Clifton, K.J., Burnier, C., Huang, S., **Kang**, M.-W., and Schneider, R. *Pedestrian Demand Model and Crash Analysis Protocol*, Prepared for Office of Traffic and Safety, Maryland State Highway Administration, Maryland Department of Transportation, June 2008.
17. Clifton, K.J., Burnier, C., Huang, S., **Kang**, M.-W., and Schneider, R. *Pedestrian Demand Model for Evaluating Pedestrian Risk Exposure*. Final Report for Office of Traffic and Safety, Maryland State Highway Administration, Maryland Department of Transportation, June 2008.
18. **Kang**, M.-W., Schonfeld, P., Jha, M.K., and Karri, G. *Improved Alignment Optimization and Evaluation*, Final Report for Maryland State Highway Administration, MD-07-SP608B4P, Maryland Department of Transportation, June 2007.
19. **Kang**, M.-W. and Schonfeld, P. *Analysis of Towboat Operating Areas*, Final Report for the Institute for Water Resources (IWR), IWR Report 06-NETS-R-04, US Army Corps of Engineers, *Navigation Economic Technologies (NETS) News*, Vol. II, Issue 3, March 2006.
20. **Kang**, M.-W. and P. Schonfeld, *Prescreening and Repairing in Highway Alignment Optimization*, TSC Report 2006-23, University of Maryland, College Park, August 2006.
21. **Kang**, M.-W., Jha, M.K., and Schonfeld, P. *3D Highway Alignment Optimization for Brookeville Bypass*. Final Report for Maryland State Highway Administration, MD-04-XXX, Maryland Department of Transportation, November 2004.
22. **Kang**, M.-W. *Development of Accident Prediction Models Based on Roadway Geometric Characteristics at Freeway Curve Sections*. Master's Thesis, Hanyang University, Korea (South), February 2003.

8. Professional Presentations (71) (graduate student*; corresponding author‡)

1. Hossain*, M.D. and **Kang**‡, M.-W., Field Evaluation of Continuous and Discrete Dynamic All-Red Extension Systems at Rural High-Speed Signalized Intersections. 106th Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2027.
2. Hossain*, M.D. and **Kang**‡, M.-W., Field Evaluation of Fully Actuated Signal Coordination with Dynamic Green and All-Red Extensions on an Urban Arterial. 106th Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2027.
3. Wu‡, S., Oyelere*, A., Cleary, J., **Kang**, M.-W., LaCross, L., Ji, X., Estims, J. Bringing Specifications to Life: Integrating Standards, Codes, and Hands-On Learning in Civil Engineering Materials Education. Paper ID #49864, 2026 ASEE Southeast Conference, March 8-10, University of Memphis, Tennessee. [Podium]
4. Hossain*, M.D. and **Kang**‡, M.-W., Enhancing Red Light Running Crash Severity Modeling Using Conditional Tabular Generative Adversarial Network and SHAP-Based Analysis. 105th Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2026. [poster]
5. Wu‡, S., Oyelere*, A., Karim*, S., **Kang**, M.-W., Cleary, J., Cotton, C., and Srinivasan, K., Sustainable Pavement Overlay for Low-Volume Roads Using Cold Mix Asphalt: Construction and Field Performance. 105th Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2026. [poster]
6. **Kang**, M.-W. and Hossain*, R. Improving Safety and Efficiency of Rural High-Speed Intersections with Dynamic Dilemma Zone Protection (DZP): Alabama Pilot Study. 2025 AASHTO Safety Summit and Peer Exchange. New Orleans, Louisiana, October 28-30, 2025
7. Wu, S., **Kang**, M.-W., and Cleary, J. Case Study of Integrating Standards, Codes, and Specifications into Engineering Curricula: Various Pathways to Professional Readiness. 2025 ASEE Annual Conference, Montreal, Canada, June 22-25, 2025.
8. Wu, S., **Kang**, M.-W., Cleary, J., and L. LaCross. Fast-Track to Research Writing Mastery: A 9-Week Intensive Course for Graduate Students. Section 2-2: Technical Communication. 2025 ASEE Southeastern Section Conference, Mississippi State University, March 9 - 11, 2025
9. Hossain*, R. and **Kang**‡, M.-W. The Impact of Detection Zone Length on Continuous-Wide-Area (CWA) Detector-Based Dilemma Zone Protection at Signalized Intersections, 104th Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2025. [poster]
10. Hossain*, R., **Kang**‡, M.-W., Rahman, N., Biswas, P., and Rahman, M. Safety Evaluation of Dilemma Zone Protection System for Rural, High-Speed Signalized Intersections Using Empirical Bayes Method, 104th Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2025. [poster]
11. **Kang**‡, M.-W. (invited). Drowsy Driving Research in Alabama. 2024 Alabama Road Safety Conference, Gulf Shores, AL. Oct. 15 – 17, 2024. [platform]
12. Hossain*, M.D., **Kang**‡, M.-W., Rahman*, M., Biswas*, P., Analyzing Red-Light Runners with Speed-Space Diagrams and Introducing Dynamic All-Red Extension for Crash Prevention. 103rd Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2024. [poster]
13. Biswas*, P., **Kang**‡, M.-W., Hossain*, M.D., Rahman*, M., Evaluation of Field Implementation of FYA Variable Left-Turn Traffic Operation by Time-of-Day at Signalized Intersections on Multilane Divided Highways in Alabama. 103rd Annual Meeting of Transportation Research Board of

National Academies of Sciences, Washington DC, January 2024. [poster]

14. **Kang**‡, M.-W. (invited). Dilemma Zone Protection System (DZP) Pilot Study Results. 2023 Alabama Road Safety Conference, Florence, AL. Oct. 17 – 19, 2023. [platform]
15. Rahman*, M., **Kang**‡, M.-W., Biswas*, P. Dynamic Dilemma Zone Protection System for High-Speed Signalized Intersections: A Comprehensive Field Assessment. 102nd Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2023. [poster]
16. Biswas*, P., **Kang**‡, M.-W. and Rahman*, M. Safety Evaluation of Offset Left-Turn Lanes and FYA Signals at Signalized Intersections on Multi-lane Divided Highways in Alabama. 102nd Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2023. [platform]
17. Tahri*, Omar, Wu, Shenghua, Wu, and **Kang**‡, M.-W. Low Carbon Technology: 100% Reclaimed Asphalt Pavement Cold Mix Asphalt. ASCE International Conference on Transportation & Development 2022 (ASCE ICTD 2022), Seattle, WA, May 31 – June 3, 2022. [poster]
18. Rahman*, M. and **Kang**‡, M.-W. Modeling Dynamic Dilemma Zones to Assess Safety of High-Speed Signalized Intersections, International Conference on Transportation & Development (ICTD 2022), American Society of Civil Engineers (ASCE), Presentation ID: 1203591, Seattle, Washington, United States, from May 31 to June 3, 2022. [poster]
19. Rahman*, M. and **Kang**‡, M.-W. Safety Evaluation of Drowsy Driving Advisory System: Alabama Case Study, International Conference on Transportation & Development (ICTD 2022), American Society of Civil Engineers (ASCE), Presentation ID: 1203355, Seattle, Washington, United States, from May 31 to June 3, 2022. [poster]
20. **Kang**‡, M.-W. (invited). Dilemma Zone Length & Location: Surrogate Safety Measures of High-Speed Signalized Intersections: Alabama Case Study. 65th Alabama Transportation Conference, Montgomery, AL. Feb. 9 – 10, 2022. [platform]
21. Biswas*, P., Rahman*, M. and **Kang**‡, M.-W. Machine Learning-based Automated Left-Turn Vehicle Counts with Conventional Presence-Mode Long-Loop Detectors: Alabama Case Studies. 101st Annual Meeting of Transportation Research Board of National Academies of Sciences, Washington DC, January 2022. [poster]
22. Jagirdar*, R., Lee, J., Besenski, D. and **Kang**‡, M.-W. (2021) Low Cost Two Dimensional (2–D) LiDAR Application for Vehicle Trajectory Construction at the Intersections. *100th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC, January 2021. [poster]
23. **Kang**‡, M. W., Rahman*, M., Lee, J. Dilemma Zone Length and Location: Safety Measure of Rural High-Speed Signalized Intersections. *99th Annual Meeting of Transportation Research Board*, Washington, D.C. January 2020. [poster]
24. **Kang**‡, M.-W. and Rahman*, M. Drowsy Driving Advisory System – Alabama Case Study. *98th Annual Meeting of Transportation Research Board,* National Academies of Sciences, Engineering, and Medicine, Washington DC, January 2019. [poster].
25. Mahbub*, M, **Kang**‡, M.-W., and Lee, J. Determining Length of Red Times for Effective Protected-Permissive Left Turn Phase Operation with Flashing Yellow Arrow Signal. *98th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC, 2019. [poster].
26. Jagirdar*, R., Lee, J., Kim, K., and **Kang**‡, M.-W. Development and Evaluation of Traffic Count Sensor using Low-Cost LiDAR and Continuous Wavelet Transform. *98th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC, 2019. [platform].
27. Momtaz*, S. and **Kang**‡, M.-W. Auditory Warning Signals: Improving Driver Compliance to Roadside Safety Signs, 2017 Road Safety & Simulation Conference (RSS2017), Hague, NL, Oct.

17 – 19, 2017. [platform]

28. **Kang**‡, M. W. Drowsy Driving Advisory Systems: Educating Road Users and Preventing Drowsy Driving Crashes, *KSEA (Korean-American Scientists and Engineers Association)*, University of Virginia, Charlottesville, VA. February 17, 2017. [Skype Presentation]
29. **Kang**‡, M. W. Drowsy Driving Advisory Systems in Alabama, *60th Alabama Annual Transportation Conference*, Montgomery, Alabama. February 9, 2017. [platform]
30. **Kang**‡, M.-W. and Schonfeld, P. Analysis of Seasonal Variation of Upper Mississippi River Towboat Traffic, *96th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC, January 2017. [platform]
31. **Kang**‡, M.-W. Dilemma Zone Protection (DZP) Systems: Dilemma Zone Protection (DZP) Systems: Characterizing Driver Behavior and Optimizing DZP Boundaries, *Research Meetings with ALDOT Design and Maintenance Bureaus and Research Advisory Committee (RAC)*, Montgomery, AL, April 2016; July 2016. [platform]
32. **Kang**‡, M.-W. Crash Analysis and Public Survey for Drowsy Driving Advisory System Development, *Joint Alabama Section Institute of Transportation Engineers (ALSITE)-DSITE 2015 Annual Meeting*, Gulf Shores, AL, June 3-5, 2015
33. **Kang**‡, M.-W., Momtaz*, S., Caldwell, T., Ellzey, J. Crash Analysis and Public Survey for Drowsy Driving Advisory Systems, USA – 22nd Annual Graduate Research Forum, The Graduate School of University of South Alabama, Mobile, AL, March 16, 2015. [poster]
34. Momtaz*, S., **Kang**‡, M.-W., Caldwell, T., Ellzey, J. Effectiveness of Audible Pavement Treatments on Drivers' Compliance to Roadside Safety Signs - A Driving Simulator Study, USA – 22nd Annual Graduate Research Forum, The Graduate School of University of South Alabama, Mobile, AL, March 16, 2015. [poster]
35. **Kang**‡, M.-W., M. Assessing Safety and Operational Aspects of Interstate Highway Guide Signs, Research Meeting with ALDOT Maintenance Bureau, Alabama Department of Transportation (ALDOT), Montgomery, AL, February 2, 2015. [platform]
36. Lamondia‡, J. and **Kang**, M.-W., M. Safety Improvement Program: Using the Surrogate Safety Assessment Model (SSAM) to Identify Impacts of Traffic-Promoting Roadway Characteristics on Crash Occurrence, *Research Meeting with ALDOT Maintenance Bureau*, Montgomery, AL, Oct. 2014. [platform]
37. Mishra‡, S., **Kang**, M.-W., and Jha, M.K. "A Tri-Level Model with Environmental Considerations in Highway Alignment Optimization," *93th Annual Meeting of Transportation Research Board of the National Academies of Sciences*, Washington DC, January 2014. [poster]
38. Jha‡, M.K., **Kang**, M.-W., Mishra, S., Samanta, S., and Lyons, N. "Urban Rail Transit Planning and Design: Discussion of Practical Issues and Analytical Modeling Techniques," *93th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC, January 2014. [poster]
39. Corliss, D. and **Kang‡,** M.-W. Roundabout Feasibility for Improving a University Campus Intersection, Using Microscopic Traffic Simulation Approaches, *2nd International Conference on Sustainable Cities, Urban Sustainability and Transportation* (SCUST '13), Baltimore MD, September 2013. [platform]
40. **Kang**‡, M.-W. Reducing Crashes Caused by Drowsy & Fatigued Driving, *ALDOT Research Advisory Committee Meeting*, Montgomery, AL, April 2013. [platform]
41. **Kang**‡, M.-W. Introducing Transportation Engineering Research at University of South Alabama. *ALDOT / ADEM Meetin*g. Mobile, AL, January 2013. [platform]
42. Raju, R., Jha, M.K., **Kang**‡, M.-W., and Mishra, S. "Predicting Road Accidents and Prioritizing Road Safety Improvement Measures in India Using Adapted Traffic Conflict Techniques," *92th Annual Meeting of Transportation Research Board of the National Academies of Sciences*, Washington

DC, January 2013. [poster]

43. **Kang**‡, M.-W. Finding Minimum-Cost Alignments of Existing/Planned Highways in Alabama, using HAO Model, *ALDOT Research Advisory Committee Meeting*, Montgomery, AL, October 2012. [platform]
44. **Kang**‡, M.-W. Alabama Hurricane Evacuation Route Development: An Optimization Approach, *Research Meeting with ALDOT Transportation Planning Bureau*, Montgomery, AL, September 2012. [platform]
45. **Kang**‡, M.-W. Discussion to Improve Traffic Operation and Safety of Airport Blvd, *Research Meeting with City of Mobile Traffic Engineering Office*, Mobile, AL, September 2012. [platform]
46. **Kang,** M.-W., Schonfeld‡, P., and Jha, M.K. A Simulation Model for Energy Efficient and Safe Train Operation for Rail Transit Lines, *Research meeting with Maryland Transit Authority (MTA) Red Line Team*, Baltimore, MD, September 2012. [platform]
47. **Kang**‡, M.-W. Customizing HSM Predictive Models for AL Highways, *ALDOT Research Advisory Committee Meeting*, Montgomery, AL, July 2012. [platform]
48. **Kang**‡, M.-W. Optimizing Cost-effective & Sustainable Highways, *ALDOT Research Meeting*. Mobile, AL. June 2012. [platform]
49. **Kang**‡, M.-W. Bi-Level Highway Route Optimization, *ASCE – Mobile Branch Meeting*. Mobile, AL. May 2012. [platform]
50. **Kang**‡**,** M.-W., Jha, M.K., and R. Buddharaju. "A Rail Transit Route Optimization Model for Rail Infrastructure Planning and Design: Case Study of St Andrews, Scotland," *91th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC, January 2012. [poster]
51. **Kang**‡, M.-W. (invited) Genetic Algorithm-based Cost-effective Highway Alignment Optimization, *Invited talk at the University of Virginia – Civil and Environmental Engineering Seminar Series*. Charlottesville, VA. April 2011. [platform]
52. **Kang**‡, M.-W., Wang, S., Jha, M.K., Chen, C.-C., and Schonfeld, P. "A Simulation Framework for the Path Planning of Unmanned Autonomous Systems," *ASCE - International Conference on Vulnerability and Risk Analysis and Management* (ICVRAM)/*Fifth International Symposium on Uncertainty Modeling and Analysis* (ISUMA-2011), Hyattsville, MD, April 2011. [platform]
53. **Kang**‡, M.-W. and Shariat, S. Highway Vertical Alignment Optimization based on Fuel Efficiency, Safety and Earthwork, *Morgan Innovation Day*, Annapolis MD. February 2011. [poster]
54. **Kang**‡, M.-W., Jha, MK, and Raju, R. A Bi-Level Multi-Objective Optimization Model for Sustainable Green Highway Infrastructure Design, *Morgan Innovation Day*, Annapolis MD. February 2011. [poster]
55. **Kang**‡, M.-W., Jha, M.K., Buddharaju, R., and Hunter, J. "An Equilibrium Traffic Assignment Model for Minimizing Pollutions Derived from the Vehicular Traffic on Road Infrastructures." *International Symposium on Advances in Transport Sustainability* (ISATS2010), Arizona State University, Tempe Campus, Nov. 17-19, 2010. [platform]
56. **Kang**‡, M.-W., Jha, M.K., and Karri, G. "Determination of Robot Drop Locations for Military Path Planning Using GIS Application." *4th WSEAS International Conference on Computer Engineering and Applications* (CEA '10), Harvard University, Cambridge, Jan. 2010. [platform]
57. Jha‡, M.K., Karri, G., and **Kang**, M.-W. "A Military Path Planning Algorithm Using Visualization and Dynamic GIS." *4th WSEAS International Conference on Computer Engineering and Applications* (CEA '10), Harvard University, Cambridge, Jan. 2010. [platform]
58. **Kang**‡**,** M.-W., Yang, N., Schonfeld, P., and Jha, M.K. "Bi-Level Highway Route Optimization." *89th Annual Meeting of Transportation Research Board of National Academies of Sciences*, January 2010, Washington DC. [platform] [poster]

59. Yang‡, N., **Kang**, M.-W., Schonfeld, P., and Jha, M.K. “Multiple Objective Optimization of Highway Alignments Incorporating Preference Information.” *89th Annual Meeting of Transportation Research Board of National Academies of Sciences*, January 2010, Washington DC. [platform]
60. **Kang**‡, M.-W. (invited) Multi-objective Bi-Level Highway Alignment Optimization, *Invited talk at the Korea Transportation Institute*. Seoul, Korea. March 2009. [platform]
61. Burnier, C., Clifton‡, K.J., Huang, S., **Kang**, M.-W., and Schneider, R. “A Meso-Scale Model of Pedestrian Demand.” *ACSP-AESOP 4th Joint Congress*, in Chicago, Illinois, 2008 [platform]
62. Schonfeld, P., **Kang**, M.-W, and Jha, M.K. “Optimizing Highway Alignments with Genetic Algorithms and GIS.” *Research Meeting with Pennsylvania Department of Transportation*, Harrisburg PA, November, 2008. [platform]
63. Schonfeld, P., **Kang**, M.-W, and Jha, M.K. “Highway Alignment Optimization with Genetic Algorithms and GIS.” *Research Meeting with Virginia Department of Transportation*, Richmond VA, October, 2008. [platform]
64. Karri, G., Jha, M.K., **Kang**, M.-W., and Schonfeld, P. “Application of GIS in Highway Alignment Optimization.” *TUgis07: 20th Annual Geographic Information Science Conference*, Towson, MD, March 2007. [platform]
65. Schonfeld, P., **Kang**, M.-W, and Jha, M.K. “Improved Alignment Evaluation and Optimization Model,” *Intermediate Research Meeting with Maryland State Highway Administration*, Baltimore MD, June, 2006. [platform]
66. Schonfeld, P., **Kang**, M.-W, and Jha, M.K. “Improved Alignment Evaluation and Optimization Model,” *Interim Research Meeting with Maryland State Highway Administration*, Baltimore MD, March, 2006. [platform]
67. **Kang**, M.-W., Jha, M.K., and Schonfeld, P. “3D Highway Alignment Optimization for Brookeville Bypass.” *85th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC. January 2006. [poster]
68. **Kang**, M.-W., Kim, T., and Doh, T.W. “A New Methodology to Determine Length of Highway Horizontal Curve Sections for Accident Estimation Model.” *84th Annual Meeting of Transportation Research Board of National Academies of Sciences*, Washington DC. January 2005. [poster]
69. Schonfeld, P. and **Kang**, M.-W. “Innovative Highway Alignment Optimization Methods,” *Research Meeting with FHWA-Turner Fairbank*, McLean, VA, April, 2005. [platform]
70. **Kang**, M.-W., Son, B., and Doh, T.W. “Development of a Dividing Method and Accident Estimation Models for Highway Horizontal Curve Sections Based on Geometric Characteristics.” *5th Eastern Asia Society for Transportation Studies (EAST) Conference*, Fukuoka, Japan. November 2003. [platform]
71. **Kang**, M.-W. and Doh, T.W. “Optimization Strategy with External Metering on Urban Network: a Simulation Study.” *50th Korean Society of Civil Engineers Annual Conference*, Seoul, Korea. 2001. [platform]

8. Professional & Scholarly Activities

8.1 Professional Memberships (National/International)

• American Association of Civil Engineers	Member (National)
• ASCE – Transportation & Development Institute	Member (National)
• ASCE T&DI – Street & Highway Operations Committee	Member (National)
• ASCE T&DI – Artificial Intelligence (AI) in Transportation Committee	Member (National)
• ASCE-T&DI – Transportation Safety Committee	Member (National)
• Transportation Research Board (TRB), a Division of National Academies of Sciences, Engineering, and Medicine	Aff Mem (International)
• TRB Artificial Intelligence & Advanced Comp Application (TRB-AED50)	Friend (International)
• TRB – AED50's Paper Review Subcommittee	Member (International)
• TRB – ABJ70, AHB65, AP065, ANB20, ANB10 Committees	Friend (International)
• National Society of Professional Engineers (NSPE)	Member (National)
• Gulf Region Intelligent Transportation Society (GRITS)	Member (Regional)
• Road Safety and Simulation (RSS) 2021 Scientific Review Committee	Member (International)
• Korean Transportation Association in America (KOTAA)	Member (International)
• Korean American Scientists and Engineers Association (KSEA)	Member (International)

8.1 Professional Activities

• Serve as a committee member of "Transportation Planning Study for Game Day and Special Events at the University" by City of Mobile	2022-Pre
• Serve as a panel member of Behavioral Traffic Safety Cooperative Research Program (BTSCRP) by Transportation Research Board (TRB), Governors Highway Safety Asso. (GHSA), & National Highway Traffic Safety Administration (NHTSA)	2021-Pre
• Serve as a task force member of "Best Dissertation Award on Artificial Intelligence and Advanced Computing Applications in Transportation" by TRB-AED50 Committee	2021-Pre
• Develop research problem statements of National Cooperative Highway Research Program (NCHRP) with TRB-AED50 (Artificial Intelligence Committee) members	2020-2021
• Served as a mentor for SURF program at Univ. of South Alabama	2014-2020
• Collaborated with researchers outside the Univ. of South Alabama to pursue competitive research grant funding (e.g., NSF, USDOT, NCHRP, NOAA, etc.)	2012-Pre
• Collaborated with faculty members in the Univ. of South Alabama to pursue competitive research grant funding	2015-Pre
• Provide research consultation to Gulf State Park to improve traffic Operations at Campground during Peak Seasons	2018
• Contributed in ALDOT-ATS Tour Video Presentation Development, Mobile, AL	2014
• Served as a secretary of Korean Transportation Association in America (KOTAA)	2006–2008
• Designed and offered a highway safety education program for USA students and local K-12 students (Risk of Texting While Driving and Drowsy Driving)	2014

8.3 Editorial Review Activities

• *Environmental Science and Pollution Research – Springer*	2021–Pre
• *Transportation Safety and Environment – Oxford Academic*	2020–Pre
• *Journal of Traffic and Transportation Engineering – KeAi and Elsevier*	2019–Pre
• *Engineering Optimization – Taylor & Francis*	2016–Pre
• *Transportmetrica A: Transport Science – Taylor & Francis*	2016–Pre
• *Sensors – MDPI*	2016–Pre
• *Journal of Advanced Transportation – Wiley*	2015–Pre
• *Canadian Journal of Civil Engineering – Canadian Science Pub*	2014–Pre

- *Transportation Research: Part C – Elsevier* 2013–Pre
- *Computer Aided Civil & Infrastructure Engineering – Wiley* 2013–Pre
- *Journal of Transportation Engineering Part A: Systems – ASCE* 2012–Pre
- *KSCE Journal of Civil Engineering – KSCE* 2012–Pre
- *Journal of Transportation Research Board (TRB) – National Academies* 2009–Pre

8.4 Professional Development Activities

- ASCE Workshop on Artificial Intelligence for Connected Community & Transport. Cyber-Physical Systems Nov. 2021
- Alabama Road Safety Conference 2018-Pre
- ALSITE – DSITE Annual Workshop, Gulf Shores, AL 2015–Pre
- Annual Alabama Transportation Conference, Montgomery, AL 2012–Pre
- ASCE Alabama – Mobile Branch Meetings, Mobile, AL 2012–Pre
- USA ILC workshops, Mobile, AL 2012–Pre
- Transportation Research Board (TRB) Annual Meetings, Washington D.C. 2003–Pre
- ASCE ExCEEd Workshop 2018
- USA ILC – 2017 Conference on Teaching and Learning (CoTL), Mobile, AL May 2017
- Railway Engineering Education Symposium (REES 2016) by AREMA at UIUC, IL July 2016
- USA ILC – Summer Academy (a three-day workshop), Mobile, AL July 2015
- NSF CAREER Proposal Workshop - CMMI Division Focus, Univ. of Maryland, MD April 2014
- USA UCUR Program at University of South Alabama. 2014; 2013
- RESTORE Act Mixer, Mobile, AL 2013; 2012
- GRITS 2013 Fall Workshop at USA, Mobile, AL Nov. 2013
- ASCE Alabama 2013 Wither Meeting, AL Mar. 2013
- Half-Day Faculty Research Orientation at USA, Mobile, AL Nov. 2012
- Made presentations to discuss engineering approaches to improve traffic operation & safety of Airport Blvd, City of Mobile - Traffic Eng. Division, Mobile, AL Sept. 2012
- NSF – Transportation Engineering Educators Workshop, Seattle, WA July 2012
- USA – Grants in Focus Meeting at USA, Mobile, AL Feb. 2012

8.5 Invited Speakers

- Invited speaker at the 65th Alabama Transportation Conference, Montgomery, AL Feb 2022
- Invited speaker at the 60th Alabama Transportation Conference, Montgomery, AL Feb 2017
- Invited speaker for Korean-American Scientists and Engineers Association (KSEA)'s Central Virginal Chapter Seminar Series, Skype Presentation Feb 2017
- Invited speaker at ALSITE 2015 Summer Meeting, Gulf Shores, AL June 2015
- Invited speaker at ASCE Mobile Branch Meeting, Mobile, AL May 2012
- Invited speaker at Univ. of Virginia – Civil Engineering Graduate Seminar Series Apr. 2011
- Invited speaker at the Korea Transportation Institute (KOTI) Mar 2009

8.6 Workshops & Conferences Organized

- Workshop Organizer, FHWA – ALDOT Road Safety Workforce Capacity Development Peer Exchange, Mobile, Alabama. (September 19, 2016 - September 21, 2016).
- Session Chair of 2nd International Conference on Sustainable Cities, Urban Sustainability and Transportation (SCUST '13); Maryland, September 17-19, 2013
- Conference Organization Committee; World Scientific and Engineering Academy and Society Series of International Conferences; Morgan State University, Nov. 7-9, 2009.

9. Student Guidance

9.1 Ph.D. Dissertation Committee

1. MD Rezwan Hossain (**Chair**), “Dynamic Traffic Signal Extension Systems for Red-Light Running Safety in Rural and Urban Arterials” Systems Engineering (Transportation Engineering Focus), August 2022 – present.
2. Abeeb Oyelere (Committee Member), Performance Enhancement of Plastomeric Low Density Polyethylene Modified Asphalt, Systems Engineering (Transportation Engineering Focus), July 2024 – Present.
3. Pranesh Biswas (**Chair**), “*Variable Left-Turn Traffic Management System for Signalized Intersections on Multilane Divided Highways*” Systems Engineering (Transportation Engineering Focus), January 2020 – July 2023.
4. MD Moynur Rahman (**Chair**), “*Development of Dynamic Dilemma Zone Protection System: Characterizing Driver Behaviors at High-Speed Signalized Intersection Using Machine Learning and Continuous Vehicle Tracking*,” Systems Engineering (Transportation Engineering Focus), January 2019 – July 2022).
5. Francis Udenta at Morgan State University (Committee Member), "Strategies to Improve the Efficiency of a Multimodal Interdependent Transportation System in Disaster," Civil Engineering (Transportation Engineering Focus), 2009 – December 2013.
6. Rene Lord-Attivor at Morgan State University (Committee Member), “Modeling Gap Acceptance and Driver Behavior at Stopped Controlled Intersections (Priority Intersections)," Civil Engineering (Transportation Engineering Focus), August 2008 – December 2012.
7. Shaghayegh Shariat at Morgan State University (Committee Member), “Sight Distance Analysis on Highway Alignment Optimization," Civil Engineering (Transportation Eng. Focus), 2009 – 2011.

9.2 MS Thesis Committee

1. Nafiur Rahman (**Chair**), “Safety Evaluation of Dynamic Green Extension at Rural Signalized Intersections,” Civil Engineering. (July 2025).
2. Sajid Md Intesher Karim (Committee Member), “Assessment of Rejuvenator Application in Cold Mix Asphalt With 100% Reclaimed Asphalt Pavement,” Civil Engineering. (July 2025).
3. Basant Bhatt (Committee Member), “Incorporating Recycled and Repurposed Plastic into 100% Reclaimed Asphalt Pavement,” Civil Engineering. (April 2025).
4. Pratik Neupane (Committee Member), “Comparison And Evaluation of Overlay and Leveling Binder in Traffic Circle Construction,” Civil Engineering. (April 2025).
5. Prajwal Chaudhary (Committee Member), “Comparative Analysis of Concrete Pavement Design Methods in Alabama,” Civil Engineering. (April 2025).
6. Abeeb Oyelere (Committee Member), “Performance Evaluation of Asphalt Binders Modified with Recycled Plastics,” Civil Engineering. (July 01, 2024).
7. Omar Tahri Joutei Idrissi Hassani (Committee Member), “Evaluation of the Effectiveness of Rejuvenator for 100% Reclaimed Asphalt Pavement Cold Mix,” Civil Engineering. (July 28, 2021).
8. Keonhyeong Kim (Committee Member), “Modeling Transversal Support from Nanofiber Z-Threads to a Carbon Fiber by Finite Element Analysis of Multiple Carbon Fiber Reinforced Plastic (CFRP) Composite Unit Cells – a Potential Mechanism to Enhance Carbon Fiber Compressive,” Mechanical. (Mar. 2019).
9. MD Moynur Rahman (**Chair**), “Dilemma Zone Location and Length: Safety Measure of High-Speed Signalized Intersections” Civil Engineering. (Dec. 2018).
10. Fariborz Bayat (Committee Member), “Numerical Modeling of Carbon Nanofiber Z-Threaded Carbon

Fiber Reinforced Polymer Composites," Mechanical Engineering. (April 2018).

11. Mahbub Mahbub (**Chair**), "Study of All Red Times for Safe and Efficient Operations of Left-Turn and Opposing Through Movements at Intersections Operated with Protected-Permissive Left-Turn (PPLT) Mode," Civil Engineering. (December 2017)
12. Grace Paola Toledo Nieto (Committee Member_, "Development of Safety Performance Functions (SPF) and Crash Modification Factors (CMF) for Rural Local Roads in Alabama," Civil Engineering. (January 2, 2016 – April 2017).
13. Salah Momtaz (**Chair**), "Effectiveness of Audible Pavement Treatments on Drivers' Compliance to Roadside Safety Signs – A Driving Simulator Study," Civil Engineering. (Jan. 2, 2014 – July 11, 2015)
14. Sungmin Kim (Committee Member), "Finite Element Analysis of the Interaction between a Crack and Clusters of Speed Signalized Intersections Inclusions in Aligned CNF Composites under Quasi-Static Loading Conditions," Mechanical Engineering. (August 2013).

9.3 MS Comprehensive Exam Committee

1. Yaswanth Kumar Kancheti (Committee Member), Civil Engineering. (Dec. 2024).
2. Vijaya Satya Lohitha Mukkamala (Committee Member), Civil Engineering. (Mar. 2018).
3. Varun Kumar Nagelli (**Chair**), Civil Engineering, December 2016.
4. Surya Prakash Rao Puttamraju (**Chair**), Civil Engineering, May 2016.
5. Anusha Mandadi (Committee Member), Civil Engineering, May 2016.
6. Ranadeep Ravula (Committee Member), Civil Engineering, May 2016.
7. Jayaprakash Nalluri (**Chair**), Civil Engineering, December 2015.
8. Jenfier Eubank (Committee Member), Civil Engineering, May 2013.

9.4 Undergraduate Researchers Supervised

1. Levi Ta, Civil Engineering. "Assessing the Effectiveness of Protected and Permissive Left Turn (PPLT) Mode with 4-Section FYA Signal," (Feb 18, 2019 – Present)
2. Kolby Kirk, Civil Engineering. "Analyzing Driver Behavior within Dilemma Zones at High-Speed Signalized Intersections," (Jan 7, 2018 – May 7, 2019)
3. Ellis McDaniel, Civil Engineering. "Assessing Safety and Performance of Recently Improved Corridors, using Surrogate Safety Assessment Model (SSAM)," (Feb 4, 2019 – May 1, 2019)
4. Thomas Calhoun, Civil Engineering. "USA Main Campus Shelby Hall Parking Lots: Restriping and Traffic Operation Design," (July 7, 2016 – Dec. 2, 2016)
5. Ryan Brainard, Civil Engineering. " Identifying High-Risk, High-Speed Signalized Intersections in Rural Alabama - Dilemma-Zone Crash Focus," (May 1, 2015 – August 15, 2016)
6. Jessie Parfait, Civil Engineering. "Modeling a Simulation Network of Airport Blvd and University Blvd, using VISSIM," (July 1, 2015 – Mar. 7, 2016).
7. Jonathan Ellzey, Civil Eng. "Assessing USA Main Campus Parking," (March 2014 – Aug. 2014).
8. Jonathan Ellzey, Civil Engineering. "Public Survey for Drowsy Driving Advisory Safety Messages," (May 19, 2014 – July 31, 2014).
9. Timothy Caldwell, Civil Engineering. "Assessing USA Main Campus Parking Management", 2014 UCUR Summer Research (March 14, 2014 - June 23, 2014).
10. Tyler Noland, Civil Engineering. "Assessing Traffic Delay and Pedestrian Safety Risk of USA Main Campus", 2014 UCUR Summer Research (March 14, 2014 - April 14, 2014).
11. Timothy Caldwell, Civil Engineering. "Developing Driving Simulation Scenarios of Rural Interstate

Highways," (August 2013 – May 2014).

12. Daniel Corliss, Civil Engineering. “Feasibility of Roundabout Implementation at the USA Main Campus", 2013 UCUR Summer Research (May 2013 - October 2013).
13. Andrew Patch, Civil Engineering. "Investigating Current State of Rest Area Information Signs on Alabama Interstate Highways," (May 2013 – Aug. 2013).

10. List of Courses Taught

10.1 University of South Alabama

• CE 102: Intro. to Civil Engineering	Spring 2021-Pre
• CE 352: Transportation Engineering	Spring 2014-Pre
• CE 353 (previously CE 452): Transportation Geometric Design	Spring 2013-Pre
• CE 432: Senior Design Project: 1 or 2 sections	Spring 2020-Pre
• CE 490: Special Topic – Traffic Engineering	Fall 2012-Pre
• CE 490: Special Topic – Highway Safety	Spring 2012 & Fall 2013
• EG 501: Research Integrity & Seminar	Fall 2013
• CE 551: Traffic Engineering	Fall 2012, Fall 2014
• CE 552: Highway Geometric Design	Fall 2011-Pre
• CE 590: SpTp: Advanced Traffic Engineering – Traffic Operations at Signalized Intersections	Fall 2020-Pre
• CE 590: SpTp: Advanced Highway Safety	Spring 2012 & Fall 2013
• CE 592: Machine-Learning Application for Driver Behavior Prediction at High-Speed Signalized Intersections	Spring 2020-Pre
• CE 592: Traffic Simulation & Design	Spring 2016, Spring 2019
• CE 592: Advanced Highway Engineering/Design	Spring 2013-Sum 2014
• CE 599: Master Thesis Research	Sum 2014-Pre
• SE 699: Ph.D. Dissertation Research	Fall 2019-Pre

10.2 Morgan State University

• CEGR 670: Highway Safety	Fall 2011
• CEGR 656: Transportation Models and Simulation Analysis	Spring 2011
• CEGR 467: Civil Engineering Systems and Optimization	Spring 2011
• CEGR 697: Geographic Information System for Transportation	Fall 2010
• CEGR 651: Computer Aided Highway Engineering Design	Spring 2010

11. Service at University of South Alabama

11.1 University Level

- Member, University Academic Integrity Review Panel (AIRP) (August 2019 - Present)
- Full Member, University Graduate Faculty (December 2017 - Present)
- Participant, USA Strategic Planning Focus Group Discussion (July 2021 – Present)
- Panelist, Global USA - Recruiting International Students (2017 - 2018)
- Associate Member, University Graduate Faculty (January 2012 - December 2017)
- Student Marshal, University Graduation Commencements. (August 2014 - May 2017)

11.2 College Level

- Chair, College of Engineering Ad Hoc Sabbatical Committee (Sep 2026 – Present)

- Member, College of Engineering Strategic Planning Committee Meeting (Oct 2025 – Present)
- Member, College of Engineering Dean Search Committee (Feb 2024 – Present)
- Member, College Promotion and Tenure Academic Standards Committee (Aug 2022 – Spring 2023)
- Member, CCEE Department Chair Search Committee (February 2021 – Aug. 2022)
- Member, College Academic Standards Committee (July 2019 - Present)
- Participant, College - Order of the Engineer Ceremony (January 2012 - Present)
- Member, College Computing Committee (January 2015 - July 2019)
- Chair, College Safety Committee (August 2014 - August 2017)
- Member, College EG 501Committee. (August 2014 - December 2014)
- Member, College Undergraduate Affairs committee (UAC) (August 2013 - December 2014)

11.3 Department Level

- Chair, CCEE Department Promotion and Tenure Academic Standards Committee (Sep 2026 – Present)
- Member, CCEE Department Promotion & Tenure Evaluation Committee (September 2021 – Present)
- Graduate Coordinator, CCEE Department (May 2021 - Present)
- Member, MABE Department Promotion & Tenure Evaluation Committee (Fall 2025)
- Webmaster, CCEE Department Website Management (March 2014 – Present)
- Member, CCEE Department Advisory Board (January 2012 – Present)
- Member, Search Committee for Structural Engineering Faculty (February – July 2021)

11.4 Community services that involve field of expertise

- Judge and Session Chair, Mobile Science & Engineering Fair (2014 - Present)
- Director of Education, International Baptist Church of Mobile (2014 – July 2021)
- Participant, College of Engineering 3D Printing for COVID-19 Supply Need, University of South Alabama (April – May 2020)