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EDUCATION

Ph.D. Systems Engineering (Civil Engineering Focus), University of Louisiana at Lafayette, LA (2015)
Dissertation: *"Effectiveness of Inexpensive Crash Countermeasures to Improve Traffic Safety"*
M.S. Mathematics (Major in Statistics), University of Louisiana at Lafayette, Lafayette, LA (2015)
(completed required 36 semester hour course works)
M.S. Civil Engineering, University of Louisiana at Lafayette, Lafayette, LA (2012)
Thesis: *"Evaluating Safety Improvement from Edge Lines on Rural Two-lane Highways"*
B.Sc. Civil Engineering, Bangladesh University of Engineering & technology, Dhaka (2007)
Thesis: *"Scope of Intelligent Transportation Systems in the Developing Countries"*

EXPERIENCE

2021-current Assistant Professor, Civil Engineering, Ingram School of Engineering, Texas State University, San Marcos, TX
2021-2022 Part Time Researcher, Texas A&M Transportation Institute, College Station, TX
2021-2030 Graduate Committee Faculty, Texas A&M University, College Station, TX
2020-2021 TTI Assistant Research Scientist, Texas A&M Transportation Institute, College Station, TX
2015-2020 Associate Transportation Researcher, Texas A&M Transportation Institute, College Station, TX
2014-2015 Research Associate, University of Louisiana at Lafayette, LA
2013-2014 Teaching Assistant, University of Louisiana at Lafayette, LA
2010-2012 Research Assistant, University of Louisiana at Lafayette, LA
2008-2009 Quantity Surveyor, Hennessey LLC, Dubai, U.A. E.
2007-2008 Project Engineer, Mak Estate Developments, Dhaka, Bangladesh

AWARDS

2018 Texas A&M Transportation Institute (TTI) Young Researcher Award
2017 Best of Urban Street Symposium Award: TRB 5th Urban Street Symposium
2016 Atlas/TTI Competitive Research Program Award
2015 Eno Leadership Development Fellow
2015 Gulf Region ITS (GRITS) Scholarship
2015 Best Paper Award (2nd Place) in University of Louisiana Graduate Research STEM Core
2015 Data Incubator Data Science Fellowship Semi-finalist
2014 2014 SASHTO Outstanding Graduate Research Award
2014 2014 AASHTO High Value Research Sweet Sixteen Award
2013 2013 Gulf Region ITS (GRITS) Scholarship First Place Award
2012 Travel award for 9th Postgraduate Academic Forum of Beihang University, China
2012 University of Louisiana Engineering Designing Leader
2011-2014 Deep South Institute of Transportation Engineers Scholarship

LICENSES/CERTIFICATES

2016 Reasoning, Data Analysis, and Writing Specialization Certificate, Duke University
2014 Data Science Specialization Certificate, John Hopkins University

PROFESSIONAL SERVICE ACTIVITIES

2019-2020 Member, Association of Pedestrian and Bicycle Professionals (APBP)
2015-2016 Vice Chair for Membership, Young Professionals in Transportation (YPT) Houston Chapter
2014- Member, Gulf Region Intelligent Transportation Society
2012- Associate Member, American Society of Civil Engineers (ASCE)
2011- Member, Institute of Transportation Engineers (ITE)

COMMITTEE MEMBERSHIPS

Transportation Research Board

2021-2023	Panel Member, ACRP 11-03/Topic S03-16: State Aviation Funding: Project Prioritization and Selection Processes
2021-2023	Panel Member, NCHRP 08-141: Guidance for Local Truck Parking Regulations
2020-2023	Member, Information and Knowledge Management (AJE45)
2020-2023	Member, Artificial Intelligence and Advanced Computing Applications (AED50)
2019-2021	Member, Impairment in Transportation (ACS50)
2016-2020	Member, Library and Information Science for Transportation (ABG40)
2019-2021	Member, Data-Driven Safety Analysis (DDSA) Sub-committee
2019-2021	Panel Member, NCHRP 23-03: Targeted Guidance and Information Support to State DOT CEOs on Cybersecurity Issues and Protection Strategies
2018-2021	Panel Member, NCHRP 08-120: Initiating the Systems Engineering Process for Rural Connected Vehicle Corridors

SERVICE

- Editor, *IATSS Research*, Elsevier.
- Handling Editor, *Transportation Research Record: Journal of the Transportation Research Board*, Sage Journals.
- Academic Editor, *PLOS One*
- Associate Editor, *Frontiers in Future Transportation*
- Area Editor (Highway Safety & Crash Data Analysis), *Journal of Transportation Safety & Security*, Taylor & Francis.
- Editorial Board Member, *Transportation Research Interdisciplinary Perspectives*, Elsevier.
- Committee Member, The 7th International Conference on Geology Resource Management and Sustainable Development (ICGRMSD2019), December 28-29, 2019, Beijing, China
- Reviewer: *Accident Analysis and Prevention*; *Nature Energy*; *Transportation Research Part C: Emerging Technologies*; *Journal of Safety Research*; *Cities*; *Transportmetrica A: Transportation Science*.
- Treasurer, ITE Student Chapter, University of Louisiana at Lafayette

RESEARCH PROJECTS (As PI/Co-PI) [As PI: \$2.1 million; As Co-PI=\$2.0 million]

2022-2024	(PI) Develop a Real-Time Decision Support Tool for Urban Roadway Safety Improvements. TxDOT Project. (\$470,000.00) [with Texas Southern University. Budget: \$25,000]
2022-2024	(Co-PI) Using Vehicle Probe Data to Evaluate Speed Limits on Texas Highways. TxDOT Project. (\$400,000.00)
2021-2023	(PI) Developing AI-driven Safe Navigation Tool. SafeD UTC. (\$330,000.00)
2021-2023	(PI) Leveraging Artificial Intelligence (AI) Techniques to Detect, Forecast, and Manage Freeway Congestion (\$310,000.00) [with Texas Southern University. Budget: \$25,000]
2020-2022	(PI) Autonomous Delivery Vehicle as a Disruptive Technology: How to Shape the Future with a Focus on Safety? SafeD UTC. (\$2,300,000.00 [Matching fund: \$2,000,000.00])
2019-2023	(PI) Safety Enhancements at Short-Storage-Space Railroad Crossings, Michigan DOT Project. (\$110,000.00)
2020-2021	(PI) TCRP Synthesis SB-33: Uses of Social Media in Public Transportation. National Academies (\$45,000.00).
2019-2021	(PI) Develop a Real-Time Decision Support Tool for Rural Roadway Safety Improvements. TxDOT Project. (\$300,000.00)
2019-2021	(PI) Develop Speed Crash Modification Factors (CMFs) from SHRP-2 Data. FHWA Project. (\$189,891.00)
2019-2021	(Co-PI) Use of Disruptive Technologies to Support Safety Analysis and Meet New Federal Requirements, SafeD UTC. (\$1,601,000.00 [Matching fund from StreetLight Data: \$1,425,000.00])
2019	(PI) Innovative Data Sources for Real-time Crash Prediction. SafeD UTC Project. (\$20,000.00).
2019-2020	(Co-PI) NCHRP 20-07 (Task 384): Core Competencies for Key Safety Training. National Academies Project. Role: Co-Principal Investigator (\$75,000.00).
2018-2019	(PI) Transportation Safety Planning Noteworthy Practices. FHWA Project. (\$30,000.00)
2018-2019	(PI) Rural Speed Safety Project for USDOT Safety Data Initiative. FHWA Project. (\$240,000.00).

- 2018-2020 **(Co-PI)** Louisiana's Alcohol-Impaired Driving Problem: An Analysis of Crash and Cultural Factors. LADOTD Project. (\$175,000.00).
- 2017-2019 **(Co-PI) NCHRP 14-40:** Comparison of Cost, Safety, and Environmental Benefits of Routine Mowing and Managed Succession of Roadside Vegetation. National Academies Project. (\$300,000.00).
- 2016 **(PI)** Safety Impacts of Reduced Visibility in Inclement Weather. Atlas TTI Competitive Research Project; (\$44,000.00).
- 2016 **(PI)** Improper Passing-Related Crashes on Rural Roadways. TTI Strategic Research Project; (\$21,000.00).
- 2016 **(Co-PI)** Urban Roadway Fatality Analysis. TTI Research Project; (\$30,000.00).
- 2015 **(Co-PI)** User Sentiment Analysis with Louisiana Social Media Data for Better and Effective Crash Countermeasures. LTRC TIRE Project; (\$30,000.00).

Key Researcher

- 48 2021-2023 **NCHRP 07-30:** Methods for Assigning Short-Duration Traffic Volume Counts to Adjustment Factor Groups for Estimating AADT
- 47 2021-2022 **NCHRP 17-71A:** Proposed AASHTO Highway Safety Manual, Second Edition, National Academies.
- 46 2020-2023 **NCHRP 15-76:** Designing for Target Speed, National Academies.
- 45 2020-2022 Develop Highway Safety Manual (HSM) Safety Performance Functions (SPFs) and Calibration Factors for Texas, TxDOT Project.
- 44 2019-2022 Enhancing Freeway Safety Prediction Models. TxDOT Project.
- 43 2019-2022 Improving and Communicating Speed Management Practices. TxDOT Project.
- 42 2019-2022 Quantifying the value of Right of Way. TxDOT Project.
- 41 2019-2022 Implementation of Automated Traffic Signal Performance Measures. TxDOT Project.
- 40 2019-2022 Examine Trade-off between Centerline Separation and Shoulder Width Allotment. TxDOT Project.
- 39 2019-2022 **NCHRP 03-134:** Determination of Encroachment Conditions in Work Zones
- 38 2019-2024 **NCHRP 17-92:** Developing Safety Performance Functions for Rural Two-Lane Highways that Incorporate Speed Measures.
- 37 2019-2023 ELCSI-PFS, Phase XI, Safety Evaluations of Mini-Roundabouts and Wrong Way Driving Improvements, FHWA.
- 36 2019 Using Machine Learning Tools to Identify Pedestrian Crash Types. TTI
- 35 2019 Winter-Related Performance Analysis, PennDOT
- 34 2019-2022 **NCHRP 06-18:** Guide for Snow and Ice Control Operations
- 33 2019-2022 Transportation Pooled Fund Study # TPF-5(361): SHRP2 Naturalistic Driving Study Pooled Fund: Advancing Implementable Solutions
- 32 2019-2023 Pre-Crash Modification Factors Study for Curb Extensions and Bicycle Specific Intersection Markings, FHWA
- 31 2018-2020 Traffic Safety Improvements at Low Water Crossings, TxDOT.
- 30 2018-2020 Evaluation of Roadside Treatments to Mitigate Roadway Departure Crashes, TxDOT.
- 29 2018-2021 Development of Pedestrian Intersection Crash Modification Factors, FHWA project.
- 28 2018-2020 **NCHRP 05-24:** Guidelines for Vehicle and Equipment Color, Marking, and Lighting.
- 27 2018-2020 **NCHRP 14-41:** Permanent Vegetation Control Treatments for Roadsides.
- 26 2018 Evaluation of Bicycle and Pedestrian Monitoring Equipment to Establish Collection Database/Methodologies for Estimating Non-Motorized Transportation. TxDOT project.
- 25 2017-2019 Collection and Estimation of Annual Average Daily Traffic (AADT) on Lower-Volume Roads. FHWA Project.
- 24 2017-2019 A Data-Driven Safety Analysis Framework for the Beaumont District. TxDOT project.
- 23 2017-2019 Identifying Infrastructure-Based Motorcycle Crash Countermeasures – Phase I. FHWA project.
- 22 2017-2019 Evaluation of Safety Improvement Projects and Countermeasures. TxDOT project.
- 21 2017-2019 Knowledge Extraction using Natural Language Processing from Farm Equipment related Crash Narratives. NIOSH project.
- 20 2017-2019 Development of Crash Modification Factors for Different Separated Bike Lane (SBL) Configurations. FHWA project.
- 19 2017-2019 CV Pilot Deployment and Program Evaluation– Planning for SMEE Assessment of Smart Columbus Program. FHWA project.
- 18 2017-2018 Influences on Bicyclists and Motor Vehicle Operating Speed within a Corridor. UTC Project.

- 17 2017 Measuring Automated Vehicle Safety. TTI project
- 16 2017 Transit Automation Tech Reviews. Volpe.
- 15 2016-2020 Field Evaluation of At-Grade Alternative Intersection Designs. FHWA project.
- 14 2016-2019 Technical Support for Focus Approach to Roadway Departure (RwD) Safety. FHWA project.
- 13 2016-2019 Pedestrian and Bike Scalable Risk Assessment Methodology (ScRAM). FHWA project.
- 12 2016-2018 **NCHRP 17-76**: Guidance for the Setting of Speed Limits.
- 11 2016-2018 **NCHRP 17-71**: Proposed AASHTO Highway Safety Manual, Second Edition.
- 10 2016 Safety Performance of Truck Lane Restrictions in Dallas-Fort Worth. TTI Research project.
- 9 2016 Analysis of the Shoulder Widening need on the State Highway System. TxDOT project.
- 8 2016 Is Age a Factor in Crashes at Channelized Right-Turn Lanes? An Exploration of Potential Relationships. Atlas Research project.
- 7 2015 User Sentiment Analysis with Louisiana Social Media Data for Better and Effective Crash Countermeasures. LTRC 2014 TIRE Award project.
- 6 2015 Developing a method for estimating AADT on all Louisiana roads. Louisiana DOT project.
- 5 2013-2014 A Comprehensive Study on Pavement Edge Line Implementation. Louisiana DOT project.
- 4 2012 Safety Improvement from Edge Lines on Rural Two-Lane Highways. Louisiana DOT project.
- 3 2012 Developing Inexpensive Crash Countermeasures for Louisiana Local Roads. Louisiana DOT project.
- 2 2011 Mining Potentially Interesting Positive and Negative Association Patterns from Traffic Safety Data. LTRC 2011 TIRE Award project.

PUBLICATIONS

Research Reports

- 29 2022 Dixon, K. NCHRP Report 995: Opposite Direction Crashes. National Academies.
- 28 2022 **Das, S.,** N. Trisha, I. Sener, and M. Walk. TCRP Synthesis 156: Uses of Social Media in Public Transportation. National Academies.
- 27 2022 **Das, S.,** K. Fitzpatrick, L. Wu, Z. Wei, I. Tsapakis, S. Paal, S. Geedipally, and E. Park. Develop a Real-Time Decision Support Tool for Rural Roadway Safety Improvements. TxDOT Project. Final Report.
- 26 2022 Geedipally, S., M. Brewer, R. Wunderlich, M. P. Pratt, L. Wu, **S. Das,** and D. Florence. Examine Trade-Offs between Center Separation and Shoulder Width Allotment for a Given Roadway Width. TxDOT Project Report. 146p.
- 25 2021 I. Tsapakis, W. Holik, S. Das, E. Kraus, and P. Anderson. Informational Guide on Data Collection and Annual Average Daily Traffic (AADT) Estimation for Non-Federal Aid-System (NFAS) Roads
- 24 2021 C. Dobrovolny, K. Balke, R. Bligh, S. Hurlebaus, S. Shi, A. Pike, **S. Das,** H. Charara, and C. Mott. Evaluation of Traffic Safety Improvements at Low Water Crossings. TxDOT Project Report.
- 23 2021 Dixon, K., **S. Das,** and I. Potts. National Cooperative Highway Research Program (NCHRP) 20-07 (384): Core Competencies for Key Safety Analysis. National Academies.
- 22 2021 Fitzpatrick, K., R. Avelar, M. Pratt, **S. Das,** and D. Lord. Crash Modification Factor for Corner Radius, Right-Turn Speed, and Prediction of Pedestrian Crashes at Signalized Intersections. FHWA Report. 136p.
- 21 2020 Fitzpatrick, K., **S. Das,** T. J. Gates, E. S. Park, M. P. Pratt, K.K. Dixon, J. Kay, M. Chakraborty. Development of the Posted Speed Limit Setting Procedure and Tool, Web-Only **NCHRP 17-76 Report.**
- 20 2020 McFalls, J., B. Storey, S. Das, and J. Haberman. Permanent Vegetation Control Treatments for Roadsides. Web-Only **NCHRP 14-41 Report** (in press).
- 20 2020 Dixon, K., S. Geedipally, E. Park, R. Srinivasan, B. Lan, M. Brewer, **S. Das,** L. Wu, C. Zegeer, and E. Rista. Guidance for Selection of Appropriate Countermeasures for Opposite Direction Crashes. **NCHRP 17-66 Report.**
- 19 2020 Avelar, R., S. Geedipally, **S. Das,** L. Wu, and B. Kutela. Evaluation of Roadside Treatments to Mitigate Roadway Departure Crashes, TxDOT Report.
- 18 2020 **Das, S.,** R. Avelar, S. Geedipally, L. Wu, D. Lord, and M. Banihashemi. Rural Speed Safety Project for USDOT Safety Data Initiative (SDI), USDOT Report. Vol 90(9).
- 17 2019 Tsapakis, I., S. Sharma, S. Geedipally, B. Dadashova, and **S. Das.** Evaluation of Highway Safety Improvement Projects and Countermeasures. TxDOT Report.
- 16 2018 Turner, S., **S. Das,** Guide for Scalable Risk Assessment Methods for Pedestrians and Bicyclists. FHWA Report.

15. 2018 Turner, S., B. Dadashova, G. Griffin, and **S. Das**. Improving the Amount and Availability of Pedestrian and Bicyclist Count Data in Texas. TxDOT Report.
14. 2018 Fitzpatrick, K., and S. Das. Influences on Bicyclists and Motor Vehicle Operating Speed within a Corridor. SafeD UTC Project Report.
13. 2018 Pratt, M., S. Geedipally, **S. Das**, and D. Lord. Pavement Safety-based Guidelines for Horizontal Curve Safety. TxDOT Report.
12. 2018 Mensar, M., Trueblood, A., Shipp, E., and **S. Das**. MCCA Data Analysis and Literature Review. FHWA Project Report.
11. 2017 **Das, S.**, B. Brimley, and A. Pant. Safety Impacts of Reduced Visibility in Inclement Weather. Report No.: ATLAS-2017-19.
10. 2017 Turner, S., **S. Das**, Synthesis of Methods for Estimating Pedestrian and Bicyclist Exposure to Risk at Area wide levels and on Specific Transportation Facilities. Publication No. FHWA-SA-17-041.
9. 2017 Le, M., **S. Das**, and M. Pratt. Safety Performance of Truck Lane Restrictions in Dallas-Fort Worth. TTI Report.
8. 2017 Dixon, K., and S. Das. Measuring and Benchmarking Automated Vehicle Safety. TTI Report.
7. 2016 Dixon, K., K. Fitzpatrick, R. Avelar, and **S. Das**. Analysis of the Shoulder Widening need on the State Highway System. Report No. 0-6840-1.
6. 2016 Fitzpatrick, K., and **S. Das**. Is Age a Factor in Crashes at Channelized Right-Turn Lanes? An Exploration of Potential Relationships. Report No.: ATLAS-2016-14.
5. 2015 Sun, X., **S. Das**, V. Ragbhan, and R. Benton. User Sentiment Analysis with Louisiana Social Media Data for Better and Effective Crash Countermeasures. Report No. 14-4TIRE.
4. 2015 Sun, X., and **S. Das**. Developing a method for estimating AADT on all Louisiana roads. Report No. FHWA/LA.15/14-3SA.
3. 2014 Sun, X., and **S. Das**. A Comprehensive Study on Pavement Edge Line Implementation. Report No. FHWA/LA.13/508. (**2014 AASHTO High Value Research Sweet Sixteen Award**)
2. 2013 Sun, X., and **S. Das**. Developing Crash Modification Factor for Louisiana. Report No. FHWA/LA.12/506.
1. 2011 Sun, X., and **S. Das**. Safety Improvement from Edge Lines on Rural Two-Lane Highways. Report No. FHWA/LA.11/487.

Book

- 2022 **Das, S.** *Artificial Intelligence in Highway Safety*. CRC Press, Boca Raton, FL.

Book Chapter

6. 2022 **Das, S.**, Chapter 10: Impact of COVID-19 on industries. COVID-19 and the Environment Impact, Concerns & Management, Elsevier.
5. 2020 **Das, S.**, S. Chatterjee, and S. Mitra. Improper Passing and Lane-Change related Crashes: Pattern Recognition using Association Rules Negative Binomial Mining. Springer.
4. 2020 Dutta, A., and **S. Das**. Tweets about Self Driving Cars: Deep Sentiment Analysis using Long Short-Term Memory network (LSTM). Springer.
3. 2020 **Das, S.**, Dutta, A., Mudgal, A., and Datta, S. Non-fear-based Road Safety Campaign as a Community Service: Contexts from Social Media. Communication in Computer and Information Science. Conference Proceeding Book of 20th International Conference on Innovations for Community Services (I4CS), 12-14 January 2020, Bhubaneswar, India. Volume 717. Springer, Hessen, Germany.
2. 2020 **Das, S.** Automobile Safety Inspection. *International Encyclopedia of Transportation*, Elsevier. Amsterdam, Netherlands.
1. 2018 Jalayer, M, Zhou, H., and **S. Das**. Exploratory Analysis of Run-Off-Road Crash Patterns. *Data Analytics for Smart Cities*. CRC Press, Boca Raton, FL.

Peer Reviewed Journal Articles (* indicates Student) [[Google Scholar Citations: 1568](#); [h-index=20](#); [i10-index=47](#)]

116. 2022 Fitzpatrick, K., A. Do, **S. Das**, R. Avelar, and M. Pratt. Improving Pedestrian Safety at Signalized Intersections: Impacts of Corner Radius. ITE Journal.
115. 2022 Kong, X., **Das, S.**, Zhang, Y., Wu, L., and Wallis, J. In-Depth Understanding of Near-Crash Events Through Pattern Recognition. Transportation Research Record.
114. 2022 Hasan, A., Jalayer, M., and **Das, S.** Severity Modeling of Work Zone Crashes in New Jersey Using Machine Learning Models. Journal of Transportation Safety and Security (in press).

- 113 2022 **Das, S.**, Sarkar, S., and Park, E. Impact of Operating Speed Measures on Traffic Crashes: Annual and Daily Level Models for Rural Two-lane and Rural Multilane Roadways. *Journal of Transportation Safety and Security* (in press).
- 112 2022 **Das, S.**, Aman, J., and Sarkar, S. News media mining to explore speed-crash-traffic association during COVID-19. *Transportation Research Record* (in press).
- 111 2022 **Das, S.**, Aman, J. and Rahman, A. Content Analysis on Homelessness Issues at Airports by News Media Mining. *Transportation Research Record* (in press).
- 110 2022 Hossain, M., Zhou, H., Rahman, M., **Das, S.**, and Sun, X. Cellphone-Distracted Crashes of Novice Teen Drivers: Understanding Associations of Contributing Factors for Crash Severity Levels and Cellphone Usage Types. *Traffic Injury Prevention*.
- 109 2022 **Das, S.** Hossain, M., Rahman, A., Kong, X., Sun, X., Mamun, G. Understanding patterns of moped and seated motor scooter (50 cc or less) involved fatal crashes using cluster correspondence analysis. *Transportmetrica A: Transport Science*.
- 108 2022 Hossain, M., Zhou, H., **Das, S.**, Sun, X., Hossain, A. Young drivers and cellphone distraction: Pattern recognition from fatal crashes. *Journal of Transportation Safety & Security*, pp. 1-26.
- 107 2022 Tamakloe, R., Sam, E., Bencekri, M., **Das, S.**, Park, D. Mining groups of factors influencing bus/minibus crash severities on poor pavement condition roads considering different lighting status. *Traffic Injury Prevention*.
- 106 2022 Obaid, I., Alnedawi, A., Aboud, G., Tamakloe, R., Zuabidi, H., **Das, S.** Factors associated with driver injury severity of motor vehicle crashes on sealed and unsealed pavements: random parameter model with heterogeneity in means and variances. *International Journal of Transportation Science and Technology*.
- 105 2022 Wei, Z.*, **S. Das**, and Y. Zhang. Short Duration Crash Prediction for Rural Two-lane Roadways: Applying Explainable Artificial Intelligence. *Transportation Research Record*.
- 104 2022 **Das, S.**, M. Le, K. Fitzpatrick, and D. Wu. Did Operating Speeds During COVID-19 Result in More Fatal and Injury Crashes on Urban Freeways? *Transportation Research Record* (in press).
- 103 2022 Khodadadi, A.*, D. Lord, I. Tsapakis, A. Shirazi, and **S. Das**. Derivation of the Empirical Bayesian method for the Negative Binomial-Lindley generalized linear model: Application in various safety analyses. *Accident Analysis & Prevention*. Vol 170.
- 102 2022 Tamakloe, R., Park, D., and **S. Das**. Factors affecting motorcycle crash casualty severity at signalized and non-signalized intersections in Ghana: insights from a data mining and binary logit regression approach. *Accident Analysis & Prevention*. Vol. 165.
- 101 2022 **Das, S.**, Sun, X., Dadashova, B., Rahman, M. Identifying Patterns of Key Factors in Sun Glare-Related Traffic Crashes. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2676(2), pp. 165-175.
- 100 2022 Tsapakis, I., **Das, S.**, Jessberger, S., Holik, W., and Anderson, P. Improving Stratification Procedures to Estimate Annual Average Daily Traffic (AADT) for Non-Federal Aid-System (NFAS) Roads. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2676(2), pp. 393-406.
- 99 2022 **Das, S.**, Sun, X., Goel*, S., Sun, M., Rahman, A., and Dutta, A. Flooding related Traffic Crashes: Findings from Association Rules. *Journal of Transportation Safety and Security*. Vol 14(1), pp. 111-129.
- 98 2022 **Das, S.**, Kong, X. Quantifying Bridge Element Vulnerability over Time. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2676(1) pp. 460-471.
- 97 2022 **Das, S.**, Dutta, A. Twelve-year Analysis of Transportation Research Board Annual Meeting's Official Hashtag. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2676(1), pp. 763-772.
- 96 2022 Kong, X., Zhang, A., Xiao, X., **Das, S.**, Zhang, Y. Work from home in the post-COVID world. Case Studies on Transport Policy.
- 95 2022 Kong, X., Li, Z., Zhang, Y., **Das, S.** Bridge Deck Deterioration: Reasons and Patterns. *Transportation Research Record: Journal of the Transportation*.
- 94 2021 **Das, S.**, Exploratory Analysis of Unmanned Aircraft Sightings using Text Mining. *Transportation Research Record: Journal of the Transportation Research Board*. Vol. 2675(5), pp. 291-300.
- 93 2021 **Das, S.**, Mousavi, S., Shirinzad, M. Pattern recognition in speeding related motorcycle crashes. *Journal of Transportation Safety & Security*. pp. 1-18.
- 92 2021 Sun, M., Sun, X., Rahman, M., Akter, M, **Das, S.** Modeling two-way stop-controlled intersection crashes with zero-inflated models on Louisiana rural two-lane highways. *LATSS Research*. Vol 45(3), pp. 303-309.
- 91 2021 **Das, S.** Understanding Fatal Crash Reporting Patterns in Bangladeshi Online Media using Text Mining. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2675(10), pp. 960-971.
- 90 2021 **Das, S.**, Datta, S., Zubaidi, H., Obaid, I. Applying interpretable machine learning to classify tree and utility pole related crash injury types. *LATTS Research*. Vol 45(3), pp. 310-316.

- 89 2021 **Das, S.,** R. Tamakloe, H. Zubaidi, I. Obaid, and A. Alnedawi. Fatal pedestrian crashes at intersections: Trend mining using association rules. *Accident Analysis & Prevention*. Vol 160.
- 88 2021 Kutela, B., B. Dadashova, and **S. Das.** Mining patterns of autonomous vehicle crashes involving vulnerable road users to understand the associated factors. *Accident Analysis & Prevention*. Vol 165.
- 87 2021 Kong, X. *, **S. Das,** H. Zhou, and Y. Zhang. Patterns of near-crash events in a naturalistic driving dataset: applying rules mining. *Accident Analysis & Prevention*. Vol 161(3).
- 86 2021 **Das, S.,** A. Dutta, and M. Rahman. Pattern recognition from light delivery vehicle crash characteristics. *Journal of Transportation Safety & Security*. pp. 1-19.
- 85 2021 **Das, S.,** K. Dey, and M. Rahman. Pattern Recognition from Cyclist Under Influence (CUI) Crash Events. *Journal of Substance Use*. pp. 1-6.
- 84 2021 Kong, X. *, **S. Das,** and Y. Zhang. Mining patterns of near-crash events with and without secondary tasks. *Accident Analysis & Prevention*. Vol 157.
- 83 2021 **Das, S.** Autonomous Vehicle Safety: Understanding Perceptions of Pedestrians and Bicyclists. Transportation Research Part F: Traffic Psychology and Behaviour. *Transportation Research Part F: Traffic Psychology and Behavior*. Vol 81, pp. 41-54.
- 82 2021 **Das, S.,** Z. Wei*, X. Kong*, and X. Xiao*. Mining crowdsourced data on bicycle safety critical events. *Transportation Research Interdisciplinary Perspectives*. Vol 10.
- 81 2021 Zubaidi, H.* , I. Obaid,* , A. Alnedawi, **S. Das,** and MM Haque. Temporal instability assessment of injury severities of motor vehicle drivers at give-way controlled unsignalized intersections: A random parameters approach with heterogeneity in means and variances. *Accident Analysis & Prevention*. Vol 156.
- 80 2021 Kong, X.* , **S. Das,** H. Zhou, and Y. Zhang. Lessons learned from pedestrian-driver communication and yielding patterns. *Transportation Research Part F: Traffic Psychology and Behaviour*. Vol 79, pp. 35-38.
- 79 2021 Khodadadi, A.* , I. Tsapakis, **S. Das,** and D. Lord. Application of Different Negative Binomial Parameterizations to Develop Safety Performance Function for Non-Federal Aid System Roads. *Accident Analysis & Prevention*. Vol 156.
- 78 2021 Rahman, M., K. Dey, **S. Das,** and M. Sherfinski. Sharing the Road with Autonomous Vehicles: A Qualitative Analysis of the Perceptions of Pedestrians and Bicyclists. *Transportation Research Part F: Traffic Psychology and Behaviour*. Vol 78, pp. 433-445.
- 77 2021 **Das, S.,** and H. Zubaidi*. City Transit Rider Tweets: Understanding Sentiments and Politeness. *Journal of Urban Technology*. pp. 1-16.
- 76 2021 Kong, X.* , **S. Das,** H. Zhou, and Y. Zhang. Patterns of near-crash events in naturalistic driving dataset: applying rules mining. *Accident Analysis & Prevention*.
- 75 2021 Park, E., K. Fitzpatrick, **S. Das,** and R. Avelar. Exploration of the relationship among roadway characteristics, operating speed, and crashes for city streets using path analysis. *Accident Analysis & Prevention*. Vol 150.
- 74 2021 Zubaidi, H.* , I. Obaid, I.* , A. Alnedawi, and **S. Das.** Motor Vehicle Driver Injury Severity Analysis Utilizing a Random Parameter Binary Probit Model Considering Different Types of Driving Licenses in 4-Legs Roundabouts in South Australia. *Safety Science*. Vol 134.
- 73 2021 **Das, S.,** and H. Zubaidi*. Last Forty Years of ITE Journal Articles: A Scientometric Overview. *ITE Journal Online Exclusive*.
- 72 2021 **Das, S.,** X. Kong*, S. Lavrenz, M. Jalayer, and L. Wu. Fatal crashes at highway rail grade crossings: A US Based study. *International Journal of Transportation Science and Technology*. pp. 17.
- 71 2021 Rahman, M., X. Sun, **S. Das,** and S. Khanal. Exploring the Influential Factors of Roadway Departure Crashes on Rural Two-Lane Highways with Logit Model and Association Rules Mining. *International Journal of Transportation Science and Technology*. Vol 10(2), pp. 167-183.
- 70 2021 **Das, S.,** I. Tsapakis, and A. Khodadadi*. Safety Performance Functions for Low-Volume Rural Minor Collector Two-lane Roadways. *LATSS Research*. Vol 45(3), pp. 347-356.
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- 66 2021 Fitzpatrick, K., **S. Das**, T. Gates, K. Dixon, and E. Park. Considering Roadway Context in Setting Posted Speed Limits. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2675(8), pp. 590-602.
- 65 2021 **Das, S.**, X. Sun, and M. Sun. Rule-based safety prediction models for rural two-lane run-off-road crashes. *International Journal of Transportation Science and Technology*. Vol 10(3), pp. 235-244.
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- 63 2021 **Das, S.**, S. Geedipally, and K. Fitzpatrick. Inclusion of Speed and Weather Measures in Safety Performance Functions for Rural Roadways. *LATSS Research*. Vol 45(1), pp. 60-69.
- 62 2021 Kong, X. **Das, S.**, Zhou, H., Zhang, Y. Characterizing phone usage while driving: Safety impact from road and operational perspectives using factor analysis. *Accident Analysis and Prevention*. Vol 152(4), pp. 1-17.
- 61 2021 **Das, S.**, X. Kong*, and I. Tsapakis. Hit and Run Crash Analysis using Association Rules Mining. *Journal of Transportation Safety and Security*. Vol 13(2), pp. 123-142.
- 60 2021 **Das, S.** Data Dive into Transportation Research Record Articles: Authors, Coauthorships, and Research Trends. *TR News*. Iss. 331, pp. 25-31.
- 59 2020 **Das, S.** Dutta, A., Dey, K., Jalayer, M., Mudgal, A. Vehicle involvements in hydroplaning crashes: Applying interpretable machine learning. *Transportation Research Interdisciplinary Perspectives*. Vol 6.
- 58 2020 Jalayer, M., M. Pour-Rouholamin, D. Patel, **S. Das**, and H. Parvardeh, H. A Penalized-likelihood Approach to Characterizing Bridge related Crashes in New Jersey. *Traffic Injury Prevention*. Vol 22(1), pp. 63-67.
- 57 2020 **Das, S.** Traffic Volume Prediction in Low-Volume Roadways: Cubist Approach. *Transportation Planning and Technology*. Vol 44(1), pp. 93-110.
- 56 2020 **Das, S.**, Dutta, A., Dey, K., Jalayer, M., and Mudgal, A. Single and Multiple Vehicle Crashes due to Hydroplaning: A Case Study of Interpretable Machine Learning. *Transportation Research Interdisciplinary Perspectives (TRIP)*. Vol 6.
- 55 2020 **Das, S.**, and A. Dutta. Characterizing Public Emotions and Sentiments in COVID-19 Environment: A Case Study of India. *Journal of Human Behavior in the Social Environment*. Vol 31(1-4), pp. 167-183.
- 54 2020 Kong, X., **S. Das**, K. Jha, and Y. Zhang. Understanding Speeding Behavior from Naturalistic Driving Data: Applying Classification Based Association Mining. *Accident Analysis and Prevention*. Vol 144.
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- 52 2020 **Das, S.**, M. Le, and B. Dai. Application of Machine Learning Tools in Classifying Pedestrian Crash Types: A Case Study. *Transportation Safety and Environment*. Vol 2(2), p106-119.
- 51 2020 **Das, S.**, S. Ashraf*, L. Tran*, and A. Dutta. Pedestrians Under Influence (PUI) Crashes: Patterns from Correspondence Regression Analysis. *Journal of Safety Research*. Vol 75, pp 14-23.
- 50 2020 **Das, S.**, L. Tran*, and M. Theel*. Understanding patterns in Marijuana impaired traffic crashes. *Journal of Substance Use*. Vol. 26(1), pp. 21-29.
- 49 2020 **Das, S.**, and S. Geedipally. Rural Speed Safety Project for USDOT Safety Data Initiative: Findings and Outcomes. *ITE Journal*. Volume 90(9), pp. 38-42.
- 48 2020 **Das, S.**, and A. Dutta. Extremely serious crashes on urban roadway networks: Patterns and trends. *LATSS Research*. Vol 44(3), pp. 248-252.
- 47 2020 **Das, S.**, and L. White. RuralSpeedSafetyX: Interactive Decision Support Tool to Improve Safety, SoftwareX. Vol. 11.
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- 40 2020 Dadashova, B., G. Griffin, **S. Das**, S. Turner, and B. Sherman. Estimation of Average Annual Daily Bicycle Counts using Crowdsourced Strava Data. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2674(11), pp. 390-402.
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- 38 2020 **Das, S.**, M. Le, M. Pratt, and C. Morgan. Safety effectiveness of truck lane restrictions: a case study on Texas urban corridors. *International Journal of Urban Sciences*. Vol 24(1), pp. 35-49.
- 37 2019 Jalayer, M. O'Connell, M., Zhou, H., **Das, S.** Application of Unmanned Aerial Vehicles. Institute of Transportation Engineers. *ITE Journal*. Vol 89(7), pp. 36-42.
- 36 2019 **Das, S.**, and A. Bibeka*. Understanding Crime and Demographic Influence on Non-motorized Trips: Macro-level Analysis. *Journal of Human Behavior in the Social Environment*. Vol. 30(3), pp. 251-264.
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- 34 2019 **Das, S.** #TRBAM: Social Media Interactions from Transportation's Largest Conference. *TR News*, Iss. 324, pp. 18-23.
- 33 2019 **Das, S.**, L. Kyle, L. Wu, and R. Henk. Understanding Crash Potential Associated with Teen Driving: Survey Analysis using Multivariate Graphical Method. *Journal of Safety Research*. Vol 70, pp. 213-222.
- 32 2019 McCourt, R., K. Fitzpatrick, P. Koonce, and **S. Das**. Speed Limits: Leading to Change. *ITE Journal*, Vol 89(4), pp. 38-43.
- 31 2019 Jalayer, M., and **S. Das**. Application of Unmanned Aerial vehicle to Inspect and Inventory Interchange Assets to Mitigate Wrong-Way Entries. *ITE Journal*. Vol 8(2), pp. 146-160.
- 30 2019 **Das, S.**, A. Dutta, and X. Sun. Patterns of Rainy Weather Crashes: Applying Rules Mining. *Journal of Transportation Safety and Security*. Vol 12(9), pp. 1083-1105.
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- 28 2019 **Das, S.**, K. Jha, K. Fitzpatrick, M. Brewer, and T. Shimu*. Pattern Identification from Elderly Cyclist Fatal Crashes. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2673(6), pp. 638-649.
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- 26 2019 **Das, S.**, A. Dutta, T. Lindheimer, M. Jalayer, and Z. Elgart. YouTube as a Source of Information in Understanding Autonomous Vehicle Consumers: A Natural Language Processing (NLP) Study. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2673(8), pp. 242-253.
- 25 2019 Fitzpatrick, K., R. McCourt, and **S. Das**. Current Attitudes among Transportation Professionals with Respect to the Setting of Posted Speed Limits. *Transportation Research Record: Journal of the Transportation Research Board*. Vol. 2673(4), pp. 778-788.
- 24 2019 **Das, S.**, A. Bibeka*, X. Sun, T. Zhou, and M. Jalayer. Aging Pedestrian Fatal Crash Related Contributing Factors: Applying Empirical Bayes Geometric Mean Method. *Transportation Research Record: Journal of the Transportation Research Board*. Vol. 2673(8), pp. 254-263.
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- 22 2019 **Das, S.**, A. Dutta, R. Avelar, K. Dixon, X. Sun, and M. Jalayer. Supervised Association Rules Mining on Pedestrian Crashes in Urban Areas: Identifying Patterns for Appropriate Countermeasures. *International Journal of Urban Sciences*. Vol 23(1), pp. 30-48.
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- 19 2018 **Das, S.**, A. Dutta, G. Medina, L. Minjares-Kyle, and Z. Elgart. Extracting patterns from Twitter to promote biking. *IATSS Research*. Vol 43(1), pp. 51-59.

- 18 2018 **Das, S.**, A. Dutta, M. Jalayer, A. Bibeka*, and L. Wu. Factors influencing the patterns of wrong-way driving crashes on freeway exit ramps and median crossovers: exploration using ‘Eclat’ association rules to promote safety. *International Journal of Transportation Science and Technology*, Vol. 7(2), pp. 114-123.
- 17 2018 **Das, S.**, R. Avelar, K. Dixon, and X. Sun. Investigation on the Wrong Way Driving Crash Patterns using Multiple Correspondence Analysis. *Accident Analysis and Prevention*. Vol. 111, pp. 43-55.
- 16 2018 **Das, S.**, A. Dutta, K. Dixon, L. Minjares-Kyle, and G. Gillette. Using Deep Learning in Severity Analysis of At-Fault Motorcycle Rider Crashes. *Transportation Research Record: Journal of the Transportation Research Board*. Vol. 2672(34), pp. 122-134.
- 15 2018 **Das, S.**, A. Mudgal, A. Dutta, and S. Geedipally. Vehicle Consumer Complaint Reports Involving Severe Incidents: Mining Large Contingency Tables. *Transportation Research Record: Journal of the Transportation Research Board*. Vol. 2672(32), pp. 77-82.
- 14 2018 **Das, S.**, X. Sun, K. Dixon, and A. Rahman. Safety Effectiveness of Roadway Conversion with a Two Way Left Turn Lane. *Journal of Traffic and Transportation Engineering*. Vol. 5(5) pp. 309-317.
- 13 2017 **Das, S.**, B. Brimley, T. Lindheimer, and M. Zupancich*. Association of Reduced Visibility with Crash Outcomes. *LATSS Research*. Vol. 42(3), pp. 143-151.
- 12 2017 **Das, S.**, K. Dixon, X. Sun, A. Dutta, and M. Zupancich*. Trends in Transportation Research: Exploring Content Analysis in Topics. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2614, pp. 27–38.
- 11 2016 **Das, S.**, X. Sun, and A. Dutta. Text Mining and Topic Modeling on Compendium Papers from Transportation Research Board Annual Meetings. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2552, pp. 48-56.
- 10 2016 **Das, S.**, and X. Sun. Association knowledge for fatal run-off-road crashes by Multiple Correspondence Analysis. *LATSS Research*, Vol. 39(2), pp. 146–155.
- 9 2015 **Das, S.**, and X. Sun. Factor Association with Multiple Correspondence Analysis in Vehicle-Pedestrian Crashes. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2519, pp. 95-103.
- 8 2015 **Das, S.**, X. Sun, F. Wang, and C. Leboeuf. Estimating likelihood of future crashes for crash-prone drivers. *Journal of Traffic and Transportation Engineering*, Vol. 2(3), pp. 145-157.
- 7 2015 Khattak, M., A. Khattab, H. Rizvi, **S. Das**, and M. Bhuyan. Imaged-based Discrete Element Modeling of Hot Mix Asphalt Mixtures. *Materials and Structures*, Vol. 48(8), pp. 2417–2430.
- 6 2015 **Das, S.**, X. Sun, and A. Dutta. Investigating User Ridership Sentiments for Bike Sharing Programs. *Journal of Transportation Technologies*, Vol. 5(2), pp. 69-75.
- 5 2014 Sun, X., **S. Das**, Z. Zhang, F. Wang, and C. Leboeuf. Investigating Safety Impact of Edgelines on Narrow, Rural Two-Lane Highways by Empirical Bayes Method. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2433, pp. 121-128.
- 4 2014 Sun, X., **S. Das**, and Y. He. Analyzing Crash-Prone Drivers in Multiple Crashes for Better Safety Educational and Enforcement Strategies. *Journal of Transportation Technologies*, Vol. 4(1), pp. 93-100.
- 3 2013 **Das, S.**, X. Sun, Y. He, F. Wang, and C. Leboeuf. Investigating the Safety Impact of Raised Pavement Markers on Freeways in Louisiana. *International Journal of Engineering Research & Innovation*, Vol. 5(2), pp. 74-80.
- 2 2013 Sun, X., **Das, S.**, Sk, R., Wang, F. Predicting driver’s crash risk based-on previous crash history. *International Journal of Engineering Research and Innovation*. Vol 5(2), pp. 74-80.
- 1 2013 Sun, X., **Das, S.** Fruge, N., Bertinot, R., Magri, D. Four-Lane to Five-Lane Urban Roadway Conversions for Safety. *Journal of Transportation Safety and Security*. Vol 5(2), pp. 106-117.

Peer Reviewed Computer Science Conference Proceeding Papers (*indicates Student)

- 4 2020 Wang, R.*, **S. Das**, and A. Mudgal. Patterns of Origin Destination Distributions: Rules Mining using Massive GPS Trajectory Data. Proceeding in the First International Conference on Urban Data Science, January 20-21, Madras, India.
- 3 2021 **Das, S.**, Zubaidi, H. Autonomous Vehicles and Pedestrians: A Case Study of Human Computer Interaction. International Conference on Human-Computer Interaction.
- 2 2021 Zubaidi, H., Obaid, I., Mohammed, H., **Das, S.**, Al-Bdairi, NSS. Hot spot analysis of the crash locations at the roundabouts through the application of GIS. *Journal of Physics: Conference Series*, vol. 1895(1).
- 1 2012 He, Y., X. Sun, L. Du, R. Jinmei, and **S. Das**. Level of service for parking facilities. 15th International IEEE Conference on Intelligent Transportation Systems, Anchorage, AK.

Peer Reviewed Transportation Engineering Conference Proceeding Papers (* indicates Student)

[note: accepted TRBAM presentation only papers later accepted for publications in other journals are not included below.]

- 36 2022 **Das, S.**, and N. Trisha*. Understanding social media usage patterns by transit agencies. The 101st Transportation Research Board Annual Meeting, Washington D.C., Jan 9-13.
- 35 2022 **Das, S.**, Z. Wei*, and A. Dutta. Rules Mining and Narrative Analysis of Consumer Complaints on Hybrid Electric Vehicles. The 101st Transportation Research Board Annual Meeting, Washington D.C., Jan 9-13.
- 34 2022 **Das, S.**, M. Tabesh*, B. Dadashova, and C. Dobrovolny. Understanding Patterns of Contributing Factors in Encroachment-Related Work Zone Crashes. The 101st Transportation Research Board Annual Meeting, Washington D.C., Jan 9-13.
- 33 2022 **Das, S.**, R. Tamakloe, H. Zubaidi, and V. Vierkant*. Virtual Public Engagement and Communications in a Transportation Conference during COVID-19. The 101st Transportation Research Board Annual Meeting, Washington D.C., Jan 9-13.
- 33 2021 **Das, S.** Traffic Fatalities by American Generations: Exploratory Evaluation using Person Level Data. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 32 2021 **Das, S.**, and R. Wang*. Racism discussed in Transportation Research: Bibliometric Analysis and Topic Modeling. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 31 2021 **Das, S.**, and M. Theel*. Pandemic and Transportation Research: Bibliometric Analysis and Topic Modeling. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 30 2021 Kong, X.*, **S. Das**, H. Zhou, and Y. Zhang. Patterns of near-crash events in naturalistic driving dataset: applying rules mining. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 29 2021 Rahman, M., K. Dey, **S. Das**, and M. Sherfinski. Sharing the Road with Autonomous Vehicles: A Qualitative Analysis of the Perceptions of Pedestrians and Bicyclists. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 28 2021 Sun, M., X. Sun, M. Rahman, and **S. Das**. Calibration and Development of Safety Performance Functions for Rural Two-Lane Two-Way Stop-Controlled Intersections in Louisiana. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 27 2021 Hosseini, P., M. Jalayer, and **S. Das**. A Multiple Correspondence Approach to Identify Contributing Factors Related to Work Zone Crashes. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 26 2021 Hosseini, P., M. Jalayer, and **S. Das**. Identifying Wrong-Way Driving (WWD) Crashes in Police Reports Using Text Mining Techniques. The 100th Transportation Research Board Annual Meeting (virtual due to COVID-19).
- 25 2020 Mahmoudzadeh, A., Z. Elgart, S. Arezoumand, T. Hansen, and **S. Das**. Designing Transit Agency Job Descriptions for Optimal Roles: An Analytical Text-Mining Approach. ASCE International Conference on Transportation and Development (virtual due to COVID-19). pp. 356-368.
- 24 2020 **Das, S.**, and A. Dutta. Co-Author Networks in Transportation Research: Findings from TRID Data. The 99th Transportation Research Board Annual Meeting, Washington D.C., Jan 12-16.
- 23 2020 Dutta, A., and **S. Das**. Framework of a Job Lexicon for Future Transportation Workforce. The 99th Transportation Research Board Annual Meeting, Washington D.C., Jan 12-16.
- 22 2020 **Das, S.**, X. Kong*, R. Wang*, and A. Mahmoudzadeh*. Pedestrian Collisions with Bicyclist: Emotion Mining using YouTube Data. The 99th Transportation Research Board Annual Meeting, Washington D.C., Jan 12-16.
- 21 2020 **Das, S.**, K. Jha*, and A. Dutta. Vision Zero Hashtags in Social Media: Understanding End-User Needs from Natural Language Processing. The 99th Transportation Research Board Annual Meeting, Washington D.C., Jan 12-16.
- 20 2020 Sun, M., X. Sun, M. Rahman, M. Akter, and **S. Das**. Safety Performance Functions for Rural Two-Way Stop-Controlled Intersections. The 99th Transportation Research Board Annual Meeting, Washington D.C., Jan 12-16.
- 19 2020 Sun, M., X. Sun, M. Rahman, M. Akter, and **S. Das**. Two-Way Stop-Controlled Intersection Analysis with Zero-inflated Models. The 99th Transportation Research Board Annual Meeting, Washington D.C., Jan 12-16.
- 18 2019 Sun, X., and **S. Das**. Estimating Annual Average Daily Traffic for Low-Volume Roadways. The 12th TRB International Conference on Low Volume Roads, being held September 15–18, Kalispell, Montana.

- 17 2019 Jalayer, M., M. O'Connell, H. Zhou, P. Szary, and **S. Das**. Application of Unmanned Aerial Vehicle to Inspect and Inventory Interchange Assets to Mitigate Wrong-Way Entries. The 98th Transportation Research Board Annual Meeting, Washington D.C., Jan 13-17.
- 16 2019 Sun, M., X. Sun, D. Shan, D. Armstrong, and **S. Das**. Louisiana Pedestrian Crash Analysis with Multinomial Logit Model and Bayesian Network. The 98th Transportation Research Board Annual Meeting, Washington D.C., Jan 13-17.
- 15 2019 **Das, S.**, and A. Dutta. Data Curation using Deep Learning. The 98th Transportation Research Board Annual Meeting, Washington D.C., Jan 13-17.
- 14 2018 **Das, S.**, L. Minjares-Kyle, R. Avelar, and B. Bommanayakanahalli*. Improper Passing related Crashes: Identifying Patterns using Negative Binomial Precise Rules. The 7th International Symposium on Naturalistic Driving Research (NDRS 2018), Blacksburg, VA, Aug 28-30.
- 13 2018 **Das, S.**, Fitzpatrick, K., and C. M*. Vehicle Speeds in Presence of Bicyclists. Joint Western and Texas District Meeting, Keystone, CO, June 24-27.
- 12 2018 **Das, S.**, and A. Dutta. Knowledge Extraction from Transportation Research Thesaurus. The 97th Transportation Research Board Annual Meeting, Washington D.C., Jan 7-11.
- 11 2018 L. Minjares-Kyle, **Das, S.**, G. Medina, and R. Henk. Knowledge about Crash Risk Factors and Self-Reported Driving Behavior: Exploratory Analysis on Multi-State Teen Driver Survey. The 97th Transportation Research Board Annual Meeting, Washington D.C., Jan 7-11.
- 10 2017 **Das, S.** Exploring SHRP2 NDS for the perspective of Self-Driving Cars in Difficult Driving Condition. Autonomous Vehicle Symposium, San Francisco, CA, Jul 10-14.
- 9 2017 **Das, S.**, X. Sun, and K. Dixon. Converting Four lane roadways into Five lane roadways on Urban structure: Study on Safety Effectiveness. Urban Street Symposium 5, Raleigh, North Carolina, May 21-24 (**2017 Urban Street Symposium Best Paper Award**).
- 8 2017 **Das, S.**, K. Dixon, R. Avelar, and K. Fitzpatrick. Using Machine Learning Techniques to estimate non-motorized trips for rural roadways. The 96th Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 7 2017 Avelar, R., T. Lindheimer, K. Dixon, J. Miles, and **S. Das**. Safety Evaluation of the Seasonality of Crashes with Tire Debris on Highways and Freeways. The 96th Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 6 2016 X. Sun, **S. Das**, and N. Broussard. Developing crash models with supporting vector machine for urban transportation planning. The 17th Road Safety on Five Continents (RS5C) Conference, Rio de Janeiro, Brazil, May 17-19.
- 5 2016 **Das, S.**, and X. Sun. Estimating Traffic Volume of Non-state Roadways with Support Vector Regression. The 95th Transportation Research Board Annual Meeting, Washington D.C., Jan 10-14.
- 4 2016 **Das, S.** Effectiveness of Inexpensive Crash Countermeasures to Improve Traffic Safety. The 95th Transportation Research Board Annual Meeting, Washington D.C., Jan 10-14.
- 3 2015 **Das, S.**, and X. Sun. Zero-Inflated Models for Different Severity Types in Rural Two-Lane Crashes. The 94th Transportation Research Board Annual Meeting, Washington D.C., Jan 10-14.
- 2 2015 **Das, S.**, and X. Sun. Determining the Knowledge Gap in Performance Based Analysis of Geometric Design and Condition Incorporating Safety. The 94th Transportation Research Board Annual Meeting, Washington D.C., Jan 10-14.
- 1 2014 **Das, S.** Analyzing At-fault Crash-Prone Drivers of Louisiana associated with Multiple Crashes. SASHTO 2014 Annual Conference, New Orleans, LA, Aug 23-27 (**2014 SASHTO Outstanding Graduate Research Award**).

TALKS/WORKSHOPS

20. 2021 A Real-time Decision Support Tool for Rural Roadways. November 29, Austin.
19. 2021 New Frontiers in Highway Safety Research. UL Lafayette Civil Engineering Department Invited Talk. November 24 (virtual).
18. 2021 Naturalistic Driving Studies with focus on Novice Teenage Drivers—Research Challenges and Opportunities. American Statistical Association Invited Talks. November 3 (virtual).
17. 2021 Application of Big Data in Highway Safety Modeling. Transportation Data Science Seminar Series. Texas A&M University Institute of Data Science, College Station, March 11.
16. 2019 Application of Natural Language Processing (NLP) in Transportation Studies. Texas A&M University ITE General Meeting, College Station, TX, February 2.
15. 2019 TxDOT Roadway Departure Safety Implementation Workshop. Lubbock, TX. November 4.

- 14 2019 AADT Estimation Errors in Predicting Safety of Low-volume Roadways. The 98th Transportation Research Board Annual Meeting, Washington D.C., Jan 13.
- 13 2019 Youtube as a Source of Information in Understanding Autonomous Vehicle Consumers: A Natural Language Processing (NLP) Study, Washington D.C., Jan 14.
- 12 2019 Injury Severity Analysis from Crash Narratives of Tree and Utility Pole associated Crashes: An Interpretable Machine Learning Approach, Washington D.C., Jan 15.
- 11 2019 Estimation of Traffic Volumes on Low-Volume Roads: Interpretable Machine Learning Approach, Washington D.C., Jan 16.
- 10 2018 Using Deep Learning in Severity Analysis of At-Fault Motorcycle Rider Crashes. The 97th Transportation Research Board Annual Meeting, Washington D.C., Jan 9.
- 9 2018 #TRBAM: Understanding Communication Patterns and Research Trends by Twitter Mining. The 97th Transportation Research Board Annual Meeting, Washington D.C., Jan 9.
- 8 2017 Developing a Method for Estimating AADT on Local Roads. 2017 TRC Transportation Engineering Conference, Hot Springs, AK, May 17.
- 7 2017 Text mining on 100 years of Air Crash Narratives: Key Findings. The 96th Transportation Research Board Annual Meeting, Washington D.C., Jan 11.
- 6 2017 Workshop on Text Mining in R: Understanding 100 years of Air Crash Narratives. Texas A&M University ITE General Meeting, College Station, TX, February 9.
- 5 2017 Workshop on R in Transportation Safety Research: Case Studies. Texas A&M University ITE General Meeting, College Station, TX, February 7.
- 4 2017 Visualization Lightning Talk: Visual Analytics by using Web GIS Tools in Transportation Decision Making. The 96th Transportation Research Board Annual Meeting, Washington D.C., Jan 11.
- 3 2016 Modeling in Roadway Safety: The Two Cultures. Texas A&M University ITE General Meeting, College Station, TX, May 17.
- 2 2015 Two days' workshop on Interactive Highway Safety Design Model (IHSDM). Civil Engineering Department, University of Louisiana at Lafayette, LA, Mar.
- 1 2014 Two days' workshop on Interactive Highway Safety Design Model (IHSDM). Civil Engineering Department, University of Louisiana at Lafayette, LA, Mar.

MEDIA

- 2022 TTI News feature 'TTI's Das Publishes Book on Artificial Intelligence in Highway Safety.'
<https://tti.tamu.edu/news/ttis-das-publishes-book-on-artificial-intelligence-in-highway-safety/>
- 2021 TTI News feature 'Das Publishes Transportation Research Record Analysis in TR News.'
<https://tti.tamu.edu/news/das-publishes-transportation-research-record-analysis-in-tr-news/>
- 2021 Texas Transportation Research Special Issue on 'Big Data Goes Country: Integrating Speed and Weather Measures to Study Rural Roadway Safety'
<https://tti.tamu.edu/researcher/big-data-goes-country-integrating-speed-and-weather-measures-to-study-rural-roadway-safety/>
- 2020 TTI News feature 'Winfree, Das Featured in Traffic Technology International.'
<https://tti.tamu.edu/news/winfree-das-featured-in-traffic-technology-international/>
- 2020 A detailed interview is featured in Traffic Technology International September Issue.
<https://tti.mydigitalpublication.co.uk/publication/?i=672384>
- 2020 An interview is featured in Star Tribune Newspaper (March 21). <https://www.startribune.com/arrests-rare-in-minor-minneapolis-hit-and-run-cases/568965202/>
- 2018 Subasish's #TRBAM analysis were posted by NASEMTRB's official social media handles.
- 2016 TRB Committee ABG40's newsletter Kaleidoscope featured Subasish's text mining paper.
- 2015 Eno Transportation Center's online annual report highlighted Subasish's Eno fellowship.
- 2014 AASHTO newsletter 'Research Makes Difference' featured on Subasish's 2014 AASHTO Sweet Sixteen High Value Research award.
- 2014 AASHTO Research Impact 2014 newsletter featured on Subasish's '4U to 5T' project.
- 2014 LTRC newsletter made a feature on Subasish's 2014 AASHTO Sweet Sixteen High Value Research award.
- 2013 GRITS Newsletter highlighted Subasish's First Place Scholarship for Academic Excellence.

COURSES DEVELOPED/TAUGHT

- 3 2022 CE 4361: Highway Engineering, Fall 2022, Texas State University
- 2 2020 Graduate level course on 'Artificial Intelligence in Highway Safety'

- 1 2020 Graduate level course on ‘Highway Safety Core Competency’ (<https://github.com/subasish/NCHRP-20-07-384-CC-Courses>)

COURSES TAUGHT/SUPERVISED

- 3 2013 Teaching Assistant of graduate level course ‘Highway Safety Fundamental Course’ at UL Lafayette.
- 2 2012 Teaching Assistant of graduate level course ‘Highway Safety Fundamental Course’ at UL Lafayette.
- 1 2011 Teaching Assistant of graduate level course ‘Highway Safety Fundamental Course’ at UL Lafayette.

RESEARCH MENTORING

Thesis Supervision

7. Committee Member, Investigating the Impact of Roadway Geometry, Speed Distribution, and Weather Condition on Roadway Daily Crash Occurrence and Severity by using Machine Learning Methods, M.S. Thesis of Z. Wei, 2021
6. Committee Member, *Vehicle Category Classification based on GPS Trajectory Data*, M.S. Thesis of R. Wang, 2020.
5. Mentor, *Investigating Safety Effectiveness of Centerline Rumble Strips on Rural Two-Lane Roads in Louisiana with Empirical Bayes Method*, M.S. Thesis of M. A. Rahman, UL Lafayette, 2016.
4. Mentor, *Development of Crash Prediction Models for Transportation Planning Analysis*, M.S. Thesis of N. Broussard, UL Lafayette, 2015.
3. Mentor, *Estimating Annual Average Daily Traffic for Non-State Roads in Louisiana*, M.S. Thesis of C. W. LeBoeuf, UL Lafayette, 2014.
2. Mentor, *Analyzing the Safety Impact of Crash-Prone Drivers in Louisiana*, M.S. Thesis of F. Wang, UL Lafayette, 2013.
1. Mentor, *Safety Effectiveness of Raised Pavement Markers*, M.S. Thesis of S. Rasel, UL Lafayette, 2012.

Postdoctoral Research Associates

Md. Nasim Khan, TXST (2022-current)
 Soheil Sohrabi, TTI (2021-2022)

PhD Students

Jinli Liu, Geography, TXST (2022-current)
 Amir Hossein Oliaee, Architecture, TAMU (2022)
 Nuzhat Kabir, Civil Engineering, TAMU (2022)
 Musfira Rahman, Civil Engineering, TAMU (2021)
 Yanmo Wang, Civil Engineering, TAMU (2021-2022)
 Zihang Wei, Civil Engineering, TAMU (2020-2022)
 Ali Khodadadi, Civil Engineering, TAMU (2019-2021)
 Shruti Ashraf, Civil Engineering, TAMU (2018-2019)
 Chaolun Ma, Civil Engineering, TAMU (2018-2019)
 Songjukta Datta, Civil Engineering, TAMU (2017-2018)

M.S. Students

Vikram Agarwal, Civil Engineering, TAMU (2020-2021)
 Ruihong Wang, Electrical and Computer Engineering, TAMU (2019-2020)
 Nabila Nazneen, Chemical Engineering, TAMU (2019-2020)
 Samia Tasnim, Public Health, TAMU (2018-2019)
 Nusrat Trisha, Public Health, TAMU (2019-2021)
 Tahmida Shimu, Civil Engineering, TAMU (2018-2019)
 Bitu Maraghehpour, Public Health, TAMU (2017-2019)
 Apoorba Bibeka, Civil Engineering, TAMU (2016-2019)
 Yucong Du, Civil Engineering, TAMU (2016-2017)
 Sadia Najneen, Public Health, TAMU (2018-2019)
 Isha Narsaria, Civil Engineering, TAMU (2018-2019)
 Noor-A Nazia, Computer Science, TAMI (2018-2019)
 Condor Manaswini, Civil Engineering, TAMU (2018-2019)
 Alence Poudel, Civil Engineering, TAMU (2018-2019)
 Bharadwaj Bommanayakanahalli, Civil Engineering, TAMU (2016-2017)
 Tamanna Tasnum, Construction Science, TAMU (2016)

Undergraduate Students

Juan Gonzalez, Civil Engineering, TAMU (2022-2023)
Valerie Vierkant, Psychology, TAMU (2019-2023)
Jaxson Murray, Civil Engineering, TAMU (2022)
Ashley Trujillo, Civil Engineering, TAMU (2021-2022)
Vinesh Ravuri, Computer Science, TAMU (2021)
Magdalena Theel, Psychology, TAMU (2017-2020)
Turzo Bose, Chemical Engineering, HUST, (2018)
Jared Wheeler, Computer Science, TAMU (2018)
Tyler Sizemore, Mechanical Engineering, TAMU (2018-2019)
Matthew Foley, Civil Engineering, TAMU (2018-2019)
Christopher Lira, Civil Engineering, TAMU (2017-2018)
Ly-Na Tran, Biomedical Science, TAMU (2017-2019)
Jacob Bruce, Civil Engineering, TAMU (2019-)
Elizabeth Clark, Civil Engineering, Virginia Tech (2017)
Anthony Teo, Computer Science and Engineering, TAMU (2018-19)
Urel Djiogan, Computer Science and Engineering, TAMU (2019)
Richard Padilla, Computer Science and Engineering, TAMU (2018-2019)
Daxton Davidson, Civil Engineering, TAMU (2018)
Michelle Zupancich, Civil Engineering, TAMU (2016)

(last updated: June 30, 2022)