Subasish Das, Ph.D.
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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

2022-current   Assistant Professor, Civil Engineering, Ingram School of Engineering, Texas State University, San Marcos, TX
2022-2023   Part Time Researcher, Texas A&M Transportation Institute, College Station, TX
2021-2022   TTI Associate Research Scientist, 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).*

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 Leaning 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**. MCCS 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: 1585; h-index=20; i10-index=48]
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. *IATSS 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. *IATSS 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*.

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69 2021 **Das, S.** An Exploratory Analysis of Unmanned Aircraft Sightings using Text Mining. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2675(5), pp. 291-300.

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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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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.

53 2020 **Das, S.** Identifying key patterns in motorcycle crashes: findings from taxicab correspondence analysis. *Transportmetrica A: Transport Science*. Vol 17(4), pp. 593-614.

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.

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48 2020 **Das, S.,** and A. Dutta. Extremely serious crashes on urban roadway networks: Patterns and trends. *IATSS 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.

46. 2020 Rahman, M., X. Sun, and **S. Das**. Reconfiguring Urban Undivided Four-Lane Highways to Five-Lane: An Unideal but Very Effective Solution for Crash Reduction. *ASCE Journal of Transportation Engineering, Part A: Systems*. Vol 146(10).

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43 2020 **Das, S.,** Dutta, A., and Brewer, M. Transportation Research Record Articles: A Case Study of Trend Mining. Transportation Research Record: *Journal of the Transportation Research Board*. Vol 2674(10), pp. 1-14.

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39	2020	**Das, S., and I. Tsapakis.** Interpretable Machine Learning Approach in Estimating Traffic Volume on Low-Volume Roadways. *International Journal of Transportation Science and Technology.* Vol 9(1), pp. 76-88.
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.*
35	2019	**Das, S.,** B. Storey, T. Shimu*, S. Mitra, M. Theel*, and B. Maraghepour*. Severity Analysis of Tree and Utility Pole Crashes: Applying Fast and Frugal Heuristics. *IATSS Research.* Vol 44(2), pp. 85-93.
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.
29	2019	**Das, S.,** I. Tsapakis, and S. Datta*. Safety Performance Functions of Low-Volume Roadways. *Transportation Research Record: Journal of the Transportation Research Board.* Vol 2673(12), pp. 798-810.
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.
27	2019	Trueblood, A., Pant, A., Jisung, K., Kum, H., Perez, M., **Das, S.,** Shipp, E. A Semi-Automated Tool for Identifying Agricultural Roadway Crashes in Crash Narratives. Traffic Injury Prevention. Vol 20(4), pp. 413-418.
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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
23	2019	**Das, S.,** S. Geedipally, K. Dixon, X. Sun, and C. Ma*. Measuring the Effectiveness of Vehicle Inspection Regulations in Different States of the U.S. *Transportation Research Record: Journal of the Transportation Research Board.* Vol 2673(5), pp. 208-219.
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.
21	2019	**Das, S.,** Bibeka, A., Sun, X., Zhou, H., Jalayer, M. Elderly Pedestrian Fatal Crash-Related Contributing Factors: Applying Empirical Bayes Geometric Mean Method. *Transportation Research Record: Journal of the Transportation.* Vol 2673(8), pp. 242-253.
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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. *IATSS 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. *IATSS 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 <u>Computer Science Conference</u> Proceeding Papers (* indicates Student)

4	2020	<u>Wang, R.*</u>, **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 <u>Transportation Engineering Conference</u> 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.**, <u>X. Kong*</u>, <u>R. Wang*</u>, and <u>A. Mahmoudzadeh</u>*. 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.**, <u>K. Jha*,</u> 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'Conell, 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. Armstong, 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 <u>B. Bommanayakanahalli*</u>. 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 <u>C, M*</u>. 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/
2022	TTI Authors TCRO Guidance for Transit Agencies using Social Media https://tti.tamu.edu/news/tti-authors-tcrp-guidance-for-transit-agencies-using-social-media/
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)

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)

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)
Bita 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)
Songjukta Datta, Civil Engineering, TAMU (2017-2018)

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)

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