# Subasish Das, Ph.D.

Assistant Professor Civil Engineering, Ingram School of Engineering RFM 5210, Texas State University San Marcos, TX-78666

Phone: (225) 288-9875 Email: subasish@txstate.edu URL: https://ait-lab.vercel.app/

## **EDUCATION**

Ph.D.	Systems	Engineering	(Civil Engineering	Focus)	University of	f Louisiana at	Lafavette, 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)

Civil Engineering, University of Louisiana at Lafayette, Lafayette, LA (2012) M.S.

Thesis: "Evaluating Safety Improvement from Edge Lines on Rural Two-lane Highways"

Civil Engineering, Bangladesh University of Engineering & technology, Dhaka (2007) B.Sc.

Thesis: "Scope of Intelligent Transportation Systems in the Developing Countries"

## **EXPERIENCE**

	, <u>-</u>
2022-current	Assistant Professor, Civil Engineering Program, Ingram School of Engineering, Texas State
	University, San Marcos, TX
2022-2023	Associate Research Scientist (part time), Texas A&M Transportation Institute, College Station, TX
2021-2030	Graduate Committee Faculty, Texas A&M University, College Station, TX
2021-2022	TTI Associate Research Scientist, Texas A&M Transportation Institute, 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
	, , ,

# 1 TW/ 1 D D O

AWARDS	
2023	Research Millionaire Award, Texas State University
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

2023-2025	Panel Member, NCHRP 23-39: Strategies for Construction Inspector Career Paths in State
	Transportation Agencies (STAs) for Retaining and Advancing Capabilities
2023-2025	Panel Member, NCHRP 19-24: Guide for Implementing Price Escalation to Balance Risk Sharing in
	DOT Construction Projects
2023-2025	Panel Member, NCHRP 08-177: Digitizing Bicycle and Pedestrian Treatments for Promoting Active
	Transportation Equity and Safety
2022-2024	Chair, Liaison and Technology Transfer sub-committee, Data Driven Safety Analysis Committee, ITE
2022-2024	Panel Member, ACRP 03-69: Identifying Congestion and Safety Risks Due to Heterogeneous Airport
	Curbside Activity and Remedial Solutions
2022-2024	Panel Member, NCHRP 05-26: Development of an Updated Warranting System for Roadway Lighting
2022-2024	Panel Member, NCHRP 08-172: Benefit Analysis of Private Health Sector Investments in
	Public/Human Transportation
2022-2023	Panel Member, NCHRP 08-141: Guidance for Local Truck Parking Regulations
2021-2023	Panel Member, ACRP 11-03/Topic S03-16: State Aviation Funding: Project Prioritization and Selection
	Processes
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**

- Search Committee Member for Tenure-Track Assistant Professor (Fall 2023), Electrical Engineering Program, Texas State University.
- Member, FY23 Research Committee, Ingram School of Engineering, Texas State University.
- Member, FY23 Personnel Committee, Ingram School of Engineering, Texas State University.
- Member, FY23 Undergraduate Scholarship Committee, College of Science and Engineering, Texas State University.
- ASCE Faculty Advisor, Civil Engineering Program, Ingram School of Engineering, Texas State University.
- Coordinator of opening ITE and ITS Student Chapters at Texas State University.
- 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)

- 2025-2027 **(PI)** NCHRP 17-134: Center Line Buffer Areas for Safety: Implementation Guidelines and Tool, National Academies (\$250,000) [with TTI]
- (PI) BTS-39: Toolkit for Reducing Substance-Impaired Driving for the Last Leg of the Journey, National Academies (\$250,000) [with PSU and Exponent]

Subasish Das Resume Page 2 of 24

- 2025-2027 **(PI-TXST)** NCHRP 17-133: Applicability of the 85th Percentile for Setting Speed Limits on Freeways, Expressways, and Rural Highways, National Academies (\$40,000).
- 2025-2027 **(PI-TXST)** Refining the Understanding of Parking Space Requirements and Its Impact on Vehicle Miles Travelled, MnDOT (\$44,999).
- 2024-2025 (PI) Big data Leveraged Intersection Safety System (BLISS), FIAP, TXST (\$11,000).
- 2024-2028 **(PI-TXST)** TxDOT 0-7215: Predicting Field Performance of Pavement Markings Statewide in Texas. TxDOT (\$85,178.75).
- 2024-2027 **(PI-TXST)** TxDOT 0-7230: Improve Safety and Decrease Vehicle Fatalities by Improving Pavement Markings. TxDOT (\$74,292.5).
- 2024-2026 **(PI-TXST)** TxDOT 0-7226: Analyze Operational and Safety Improvements Associated with Implemented Innovative Intersections in Texas, TxDOT (\$36,000).
- 2024-2026 **(PI-TXST)** TxDOT 0-7222: Develop Crash Predictive Methods for Frontage Roads Including Ramp Terminals, and Intersections with Crossroads in Texas, TxDOT (\$70,000).
- 2024-2025 **(Co-PI)** Identification of Unprecedented Coastal Flooding Hotspots for Highway Network Durability and Social Justice, CREATE UTC, USDOT (\$151,448).
- 2024-2026 **(PI-TXST)** Social and Community Factors Contributing to Pedestrian Trespass Behaviors (and Motorist Incursions) on Railroad Systems, FRA (\$264,000).
- 2024-2026 **(PI-TXST)** Roadside Feature Placement and Pedestrian Safety on Low and Intermediate Speed Road, Minnesota DOT (\$58,891).
- 2023-2024 **(PI)** SafeR: Safe Routing Tool. NSF I-Corps (\$61,000).
- 2023-2025 **(PI-TXST)** TxDOT 0-7183: Develop Crash Modification Factors for Super 2 Highways. TxDOT. Sub-contractor to Texas A&M Transportation Institute [TXST Budget: \$68,695].
- 2023-2025 **(PI-TXST)** TxDOT 0-7187: Exploring and Developing Innovative Methods for Estimating VMT on Local Roads in Texas. TxDOT. Sub-contractor to Texas A&M Transportation Institute [TXST Budget: \$40,166].
- 2023-2025 **(PI-TXST)** TxDOT 0-7189: Safety Assessment of Shared use Paths at Roadway Crossings using Exposure-based Models. TxDOT. Sub-contractor to Texas A&M Transportation Institute [TXST Budget: \$54,314].
- 2023-2025 **(PI-TXST)** TxDOT 0-7171: Barrier Striping for the reduction of accidents. TxDOT. Sub-contractor to Texas A&M Transportation Institute [TXST Budget: \$67,932].
- 2023-2025 **(PI-TXST)** Increasing Equity in Traffic Safety, AAA Foundation. Sub-contractor to University of Washington Tacoma [TXST Budget: \$60,000].
- 2023-2025 (PI) Run to R1 Postdoctoral Researcher Catalyst Program Award. TXST (\$160,000).
- 2023-2025 **(PI)** NCHRP 17-113: Incorporating Safe System Approach into the NCHRP Report 500 Series. National Academies (\$700,000) [with VHB and Rowan University].
- 2023-2025 **(PI-TXST)** Evaluation of NJDOT Hardened Traffic Paint Markings and Stripes Performance. New Jersey Department of Transportation (NJDOT) Project (\$350,000). Sub-contractor of Rowan University. [TXST Budget: \$83,000].
- 2022-2024 **(PI)** Develop a Real-Time Decision Support Tool for Urban Roadway Safety Improvements. TxDOT Project. (\$465,010.00).
- 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].
- **(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]).

Subasish Das Resume Page 3 of 24

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).

Countermeasures. LTRC TIRE Project; (\$30,000.00).					
77					
•	Researcher	NOTION OF ACCUSE A 1 1 C A 1 1			
48	2021-2023	NCHRP 07-30: Methods for Assigning Short-Duration Traffic Volume Counts to Adjustment			
47	2024 2022	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 2010	E 1 di CCC I DOT IC DOT			

Subasish Das Resume Page 4 of 24

Evaluation of Safety Improvement Projects and Countermeasures. TxDOT project.

Knowledge Extraction using Natural Language Processing from Farm Equipment related Crash

22 2017-2019

21 2017-2019

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

- 45 2024 **Das, S.,** Dadvar, S., Wu, L., Dimaiuta, M., and Weng, Y. Development of Speed Crash Modification Factors (CMFs)Using SHRP2 Roadway Information Database (RID), Volume I. FHWA Report. Final Report.
- 44 2024 **Das, S.,** Dadvar, S., Wu, L., Dimaiuta, M., and Weng, Y. Development of Speed Crash Modification Factors (CMFs)Using SHRP2 Roadway Information Database (RID), Volume II. FHWA Report. Appendices.
- 43 2024 Fitzpatrick, K., Venglar, S., **Das, S.,** Pratt, M., Park E., Avelar, R., and Le, M. Speed Limits in Texas. TxDOT Project. Final Report.
- 42 2023 Le, M., Pratt, M. P., Oliaee, A. H., **Das, S.,** Ramezani, M., Wu, J., and Guo, S. Applying Advanced Techniques to Datamine Pedestrian Crash Data. Texas A&M Transportation Institute's Center for Transportation Safety.
- 41 2023 **Das, S.,** Tsapakis, I., Khan, M., Liu, J., Mills, D., Miller, M., Balke, K., Wu, J., Azimi, M., and Qi, Y. Leveraging Artificial Intelligence (AI) Techniques to Detect, Forecast, and Manage Freeway Congestion. TxDOT Project. Final Report.
- 40 2023 Pratt, M., Geedipally, S., Le, M., Wu, L., Avelar, R., **Das, S.,** and Lord, D., Enhancing Freeway Safety Prediction Models. TxDOT Project. Final Report.
- 39 2023 Dobrovolny, C., Dadashova, B., Tabesh, M., Das, S., Kwon, H., Bligh, R., Riexinger, L., Smith, C., Gabler, H., and Hallmark, S. Addressing Encroachment-Related Safety Issues in Work Zones: A Guide. NCHRP Research Report, Issue 1055, 43p.
- 38 2023 Dobrovolny, C., Dadashova, B., Tabesh, M., Das, S., Kwon, H., Bligh, R., Riexinger, L., Smith, C., Gabler, H., and Hallmark, S. Determination of Work Zone Encroachments. <u>NCHRP Web-Only Report</u> Issue 361, 168p
- 37 2023 McFalls, J., B. Storey, S, Das, J. Habermann, and L. Bullard. Long-Term Vegetation Management Strategies for Roadsides and Roadside Appurtenances. <u>NCHRP Web-Only Report, Issue 350, 121p.</u>
- 36 2023 Das, S., I. Tsapakis, D. Torbic, S. Li, and Y. Wang. Developing AI-driven Safe Navigation Tool. SafeD UTC Report.
- 35 2023 Das, S., Lavrenz, S., Warner, J., and Khanal, B. Safety Enhancements at Short-Storage-Space Railroad Crossings. Michigan DOT Report.

Subasish Das Resume Page 5 of 24

- 34 2022 Habermann, J., W. Holik, W. Huang, S. Das, and D. Clonch. NCHRP 06-18 Report: Guide for Snow and Ice Control Operations. NCHRP Report.
- 33 2022 Geedipally, S., Dixon, K., Wu, L., Pratt, M., Avelar, R., **Das, S.**, Tsapakis, I., Lord, D., and Saini, G. Calibrating the Highway Safety Manual Predictive Methods for Texas Highways. TxDOT Project. Final Report.
- 32 2022 **Das, S.,** Wei, Z., and Ravuri, V. Safety and Operations of Automated Delivery Vehicles. SafeD. Final Report.
- 31 2022 Dixon, S., Park, E., Brewer, M., Wu, L., Geedipally, S., Srinivasan, R., Lan, B., Zegeer, C., S. Das, and Rista, E. NCHRP Report 995: Guidelines for Treatments to Mitigate Opposite Direction Crashes. National Academies.
- 30 2022 Das, S., N. Trisha, I. Sener, and M. Walk. TCRP Synthesis 156: Uses of Social Media in Public Transportation. <u>National Academies</u>.
- 29 **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.
- 28 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.
- 27 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.
- 26 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.
- 25 2021 Dixon, K., S. Das, and I. Potts. National Cooperative Highway Research Program (NCHRP) 20-07 (384): Core Competencies for Key Safety Analysis. <u>National Academies</u>.
- 24 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.
- 23 2021 Fitzpatrick, K., S. Das, M. P. Pratt, K.K. Dixon, and T. J. Gates. Posted Speed Limit Setting Procedure and Tool: User Guide. NCHRP Research Report, Issue 966, 71p.
- 22 2020 Storey, B., S. Das, J. McFalls, R. Avelar, and B. Dadashova. Comparison of Cost, Safety, and Environmental Benefits of Routine Mowing and Managed Succession of Roadside Vegetation. NCHRP 14-40 Report.
- 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. <u>NCHRP Web-Only Report, Issue 291, 190p.</u>
- 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).
- Tsapakis, I., S. Sharma, S. Geedipally, B. Dadashova, and **S. Das**. Evaluation of Highway Safety Improvement Projects and Countermeasures. TxDOT Report.
- Turner, S., Sener, I., Marin, M., White, L., S. Das, Hampshire, R., Colety, M., Fitzpatrick, K., and Wijesundera, R. 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.

Subasish Das Resume Page 6 of 24

- 10 2017 Turner, S., Sener, I., Marin, M., **S. Das,** Shipp, E., Hampshire, R., Fitzpatrick, K., Molnar, L., Wijesundera, R., Colety, M., and Robinson, S. 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*).
- Sun, X., and S. Das. Developing Crash Modification Factor for Louisiana. Report No. FHWA/LA.12/506.
- 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 <u>COVID-19</u> 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.
- 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.
- 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)

- 213 2025 Tusti, A. G., Dutta, A. K., Javed, S. A., and Das, S. Driving Education Advancements of Novice Drivers: A Systematic Literature Review. *arXiv* preprint arXiv:2503.05762.
- 212 2025 Somvanshi, S., Tusti, A. G., Chakraborty, R., and **Das, S.** Applying Tabular Deep Learning Models to Estimate Crash Injury Types of Young Motorcyclists. *arXiv preprint arXiv:2503.10474*.
- 2025 Kinero, A., Kasubi, F., Hossain, A., **Das, S.**, and Kutela, B. Perception of cyber attacks on automated vehicles and its influence on road sharing and ridership: Insights of the US perspective from a 2021 nationwide survey. *Transportation Research Part F: Traffic Psychology and Behaviour*.
- 210 2025 Somvanshi, S., Chakraborty, R., **Das, S.**, and Dutta, A. K. Crash Severity Analysis of Child Bicyclists using Arm-Net and MambaNet. *arXiv preprint arXiv:2503.11003*.
- 209 2025 Antariksa, G., Chakraborty, R., Somvanshi, S., **Das, S.**, Jalayer, M., Patel, D. R., and Mills, D. Comparative Analysis of Advanced AI-based Object Detection Models for Pavement Marking Quality Assessment during Daytime. *arXiv preprint arXiv:2503.11008*.
- 208 2025 Somvanshi, S., Liu, J., and Das, S. Gen-AI for TSMO Knowledge Management. SSRN (pre-print).
- 207 2025 Somvanshi, S., Barua, S., Liu, J., and **Das, S.** Gen-AI for Transportation Planning. SSRN (pre-print).

Subasish Das Resume Page 7 of 24

- 206 2025 Somvanshi, S., Islam, M. M., Polock, S. B. B., Chhetri, G., Anderson, D., Dutta, A., and **Das, S.** Quantum Computing in Transportation Engineering: A Survey. *SSRN (pre-print)*.
- 205 Javed, S. A., Tussti, A. G., Pandey, B., and **Das, S.** From Maneuver to Mishap: A Systematic Literature Review on U-Turn Safety Risks. *arXiv preprint arXiv: 2502.12556*.
- 204 2025 Liu, J., Antariksa, G., Somvanshi, S., and **Das, S.** Revealing equity gaps in pedestrian crash data through explainable artificial intelligence clustering. *Transportation Research Part D: Transport and Environment.*
- 203 2025 Hossain, A., **Das, S.**, Sun, X., Hasan, A. S., and Jalayer, M. A Hybrid Data Mining Framework to Investigate Roadway Departure Crashes on Rural Two-Lane Highways: Applying Fast and Frugal Tree with Association Rules Mining. *SSRN (pre-print)*.
- 202 Jafari, M. **Das, S.,** Starewich, M., and Barua, S. SUV-pedestrian crash severity modelling considering unobserved heterogeneity in means and variances. *Transportmetrica A: Transport Science*.
- 201 2025 Antariksa, G., Tamakloe, R., Liu, J., and **Das, S**. Automated and Explainable Artificial Intelligence to Enhance Prediction of Pedestrian Injury Severity. *IEEE Transactions on Intelligent Transportation Systems*.
- 200 2025 Dzinyela, R., Dadashova, B., Westfall, G., Das, S., Silvestri-Dobrovolny, C., Adanu, K. E., and Lord, D. Analysis of Motorcyclists Crash Severity using Cluster Correspondence and Hierarchical Binary Logit Models. *Multimodal Transportation*.
- 199 2025 Kutela, B., Kinero, A., Shita, H., **Das, S.**, Ruseruka, C., Chengula, T. J., and Novat, N. Understanding Spatial-temporal Attributes Influencing Electric Vehicle's Charging Stations Utilization: A Multi-City Study. *Green Energy and Intelligent Transportation*.
- Hossain, A., **Das, S.**, Jafari, M. Junaed, S., and Codjoe, J. Behavioral Insights into Older Driver Involved Crashes at High-Speed Signalized Intersections (Hssis): A Random Parameter Ordered Probit Approach. SSRN (pre-print).
- 197 2025 Mimi, M. S., Chakraborty, Barua, S., **Das, S.**, Khan, M. N., and Dadashova, B. Demographic risk factors and injury severity scores in Substance-use behaviour related traffic crashes. *Transportation Research Part F: Traffic Psychology and Behaviour*.
- Sheykhfard, A., Azmoodeh, M. **Das, S.**, and Kutela, B. Analyzing purchase intentions of used electric vehicles through consumer experiences: A structural equation modeling approach. *Transport Policy*.
- 195 2025 Kinero, A., Kutela, B. **Das, S.,** and Hossain, A. Who Should Be Responsible for Setting Standards for How Automated Vehicles are Used? Insights from the Nationwide Survey. *SSRN (pre-print)*.
- 194 2025 Somvanshi, S., Antariksa, G., and **Das, S.** Enhanced Balanced-Generative Adversarial Networks to Predict Pedestrian Injury Types. *SSRN (pre-print)*.
- 193 2025 Hossain, A., Sun, X., **Das, S.,** Jafari, M., and Rahman, M. A. Investigating Pedestrian-Vehicle Crashes on Interstate Highways: Applying Random Parameter Logit Model. *SSRN (pre-print)*.
- 192 2025 Mimi, M. S., Chakraborty, R., Liu, J., Barua, S., and **Das, S.** Exploring patterns in older pedestrian involved crashes during nighttime. *Accident Analysis & Prevention*.
- 191 2024 **Das, S.,** Barua, S., and Hossain, A. Unraveling the complex relationship between weather conditions and traffic safety. *Journal of Transportation Safety & Security*.
- 190 2024 Hossain, A., Sun, X., Islam, S., Rahman, A., and **Das, S.** Single-vehicle roadway departure crashes at rural two-lane highway curved segments: a diagnosis using pattern recognition. *International Journal of Transportation Science and Technology*.
- 189 2024 Chakraborty, R., Javed, S. A., **Das, S.,** Kutela, B., and Khan, M. N. Impact of level 2 automation on driver behavior: A study using association rules mining. *Transportation Research Part F: Traffic Psychology and Behaviour.*
- 188 2024 Somvanshi, S., Javed, S. A., Islam, M. M., Pandit, D., and **Das, S.** A Survey on Kolmogorov-Arnold Network. *arXiv preprint arXiv:2411.06078*.
- Sheykhfard, A., Azmoodeh, M., **Das, S.,** and Kutela, B. Analyzing Purchase Intentions of Used Electric Vehicles Through Consumer Experiences: A Structural Equation Modeling Approach. *Transport Policy*.
- 186 2024 **Das, S.,** Dzinyela, R., Liu, J., Dadashova, B., and Silvestri-Dobrovolny, C. Understanding patterns of factor influences in motorcycle crashes with fixed objects. *Journal of Transportation Safety & Security*.
- 185 2024 Rahman, M. A., Chakraborty, R., **Das, S.,** Mohammed, N., Hossain, M. M., and Junaed, S. Identifying attribute associations in fatal speeding crashes using latent class clustering and association rule mining. *Journal of Transportation Safety & Security.*
- 184 2024 Kutela, B., Kinero, A., Shita, H., **Das, S.,** Ruseruka, C., Chengula, T. J., and Novat, N. Understanding Spatial-temporal Attributes Influencing Electric Vehicle's Charging Stations Utilization: A Multi-City Study. *SSRN*.

Subasish Das Resume Page 8 of 24

- 183 2024 Kavianpour, S., Haghighi, F., Sheykhfard, A., **Das, S.,** Fountas, G., and Oshanreh, M. M. Assessing the risk of pedestrian crossing behavior on suburban roads using structural equation model. *Journal of Traffic and Transportation Engineering*.
- 182 2024 Kutela, B., Salum, J. H., Seif, R., **Das, S.**, and Kidando, E. Navigating the Blame Game: Investigating Automated Vehicle Fault in Collisions under Mixed Traffic Conditions. *Robotics and Autonomous Systems*.
- Somvanshi, S., **Das, S.,** Javed, S. A., Antariksa, G., and Hossain, A. A Survey on Deep Tabular Learning. *arXiv preprint arXiv:2410.12034*
- 180 2024 Kutela, B., Shita, H., Das, S., Kapaya, L., and Tarimo, E. Exploring the Role of Sponsoring Agencies in Shaping the MUTCD Using Supervised and Unsupervised Text Mining. American Society of Civil Engineers.
- 179 2024 Sheykhfard, A., Haghighi, F., Saeidi, S., SafariTaherkhani, M. and **Das, S.** Understanding the influence of environmental factors on driver speed: A structural equation modeling analysis. *LATSS Research*.
- 178 2024 Dzinyela, R., Jafari, M., **Das, S.,** Shimu, T., Alnawmasi, N., and Lord, D. Unconstrained and partially constrained temporal modelling of pedestrian injury severities. *Transportmetrica A: Transport Science*.
- 177 2024 **Das, S.,** Rahman, M., Liu, J., Ye, X., and Kutela, B. Association Patterns of Work Zone Crashes using Bayesian Network. *Transportation Research Record.*
- 176 2024 Kutela, B., Novat, N., Shita, H., Novat, N., Kalambay, P., and **Das, S.** Exploring Diversity of Activities on Shared-Use Paths: Factors and Implications for Planning and Design. *Journal of Transportation Engineering*.
- 175 2024 Dzinyela, R., Shirazi, M., **Das, S.,** and Lord, D. The negative Binomial-Lindley model with Time-Dependent Parameters: Accounting for temporal variations and excess zero observations in crash data. *Accident Analysis & Prevention.*
- 174 2024 Chakraborty, R., **Das, S., and** Khan, M. Uncovering pedestrian midblock crash severity patterns using association rules mining. *Transportmetrica A: Transport Science*.
- 173 2024 Ye, X., Li, S., **Das, S.**, and Du, J. Enhancing routes selection with real-time weather data integration in spatial decision support systems. *Spatial Information Research*.
- 172 2024 Kutela, B., Menon, N., Herman, J., Ruseruka, C., and **Das, S.** A regression-content analysis approach to assess public satisfaction with shared mobility measures against COVID-19 pandemic. *Journal of Transport & Health.*
- Dzinyela, R., Adanu, E. K., Gupta, H., Koirala, P., Alnawmasi, N., **Das, S.,** and Lord, D. Analyzing fatal crash patterns of recidivist drivers across genders and age Groups: A hazard-based duration approach. *Accident Analysis & Prevention.*
- GBD 2019 Blindness and Vision Impairment Collaborators group, **Das, S.** Global estimates on the number of people blind or visually impaired by cataract: a meta-analysis from 2000 to 2020. *Eye.*
- 169 2024 Liu, J., **Das, S.,** Zhan, F. and Khan, M. Spatial Analysis of Geographical Disparities in Pedestrian Safety. *Transport Policy*.
- GBD 2021 Risk Factors Collaborators group, **Das, S.** Global burden and strength of evidence for 88 risk factors in 204 countries and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. The Lancet.
- GBD 2021 Forecasting Collaborators group, **Das, S.** Burden of disease scenarios for 204 countries and territories, 2022–2050: a forecasting analysis for the Global Burden of Disease Study 2021. *The Lancet.*
- Hossain, A., Sun, X., **Das, S.,** Jafari, M., and Codjoe, J. Investigating older driver crashes on high-speed roadway segments: a hybrid approach with extreme gradient boosting and random parameter model. *Transport metrica A: Transport Science.*
- 165 2024 Kutela, B., Novat, N., Kinero, A., Samuel, O., and **Das, S.** Understanding user behaviors and safety concerns on shared use paths in Edmonton, Canada. *Cities*.
- 164 2024 Rahman, M., Das, S., Hossain, A., Codjoe, J., Mitran, E., and Sun, X. Exploring Attribute Associations in Pedestrian-Involved Hit-and-Run Crashes through Cluster Correspondence Analysis. *Transportation Research Record.*
- 163 2024 Sheykhfard, A., Azmoodeh, M., Kutela, B., **Das, S.,** and Fountas, G. From self-reports to observations: Unraveling digital billboard influence on drivers. *Transportation Research Part F: Traffic Psychology and Behaviour*.
- Das, S., Jafari, M., Hossain, A., Chakraborty, R., and Mimi, M. S. Toll road crash severity using mixed logit model incorporating heterogeneous mean structures. *Transportmetrica A: Transport Science*.
- GBD 2021 Causes of Death Collaborators group, **Das, S.** Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Latent*.

Subasish Das Resume Page 9 of 24

- GBD 2021 Nervous System Disorders Collaborators group, **Das, S.** Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Latent Neurology*.
- 159 2024 Khan, N., and **Das, S.** Advancing traffic safety through the safe system approach: A systematic review. *Accident Analysis & Prevention.*
- 158 2024 Khan, N., **Das, S.,** and Liu, J. Predicting pedestrian-involved crash severity using inception-v3 deep learning model. *Accident Analysis & Prevention*.
- Faroughi, S., Pawar, N., Fernandes, C., Raissi, M., **Das, S.,** Kalantari, N., and Mahjour, S. Physics-Guided, Physics-Informed, and Physics-Encoded Neural Networks and Operators in Scientific Computing: Fluid and Solid Mechanics. *Journal of Computing and Information Science in Engineering*.
- Hossain, A., Sun, X., **Das, S.**, Jafari, M., and Rahman, A. Investigating pedestrian-vehicle crashes on interstate highways: applying random parameter binary logit model with heterogeneity in means. *Accident Analysis & Prevention*.
- 155 2024 Kutela, B., Ngeni, F., Novat, N., Shita, H., Ngotonie, M., Mwekh'iga, R., Langa, N., and **Das, S.**Understanding socio-demographic factors associated with shared-use-paths (SUPs) utilization. *Journal of Cycling and Micromobility Research*.
- Wei, Z., **Das, S.,** Wu, Y., Li, Z., and Zhang, Y. Modeling the lagged impacts of hourly weather and speed variation factors on the segment crash risk of rural interstate freeways: Applying a space–time-stratified case-crossover design. *Accident Analysis & Prevention*.
- 153 2024 Liu, J., **Das, S.,** and Khan, M., Decoding the impacts of contributory factors and addressing social disparities in crash frequency analysis. *Accident Analysis & Prevention*.
- 152 2024 Hossain, M., Zhou, H., Sun, X., Hossain, A., and **Das, S.** Crashes involving distracted pedestrians: Identifying risk factors and their relationships to pedestrian severity levels and distraction modes. *Accident Analysis & Prevention.*
- 151 2023 GBD 2019 Bangladesh Burden of Disease Collaborators group, **Das, S.** The burden of diseases and risk factors in Bangladesh, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Global Health.*
- 150 2023 GBD 2021 Carbon Monoxide Poisoning Collaborator group, **Das, S.** Global, regional, and national mortality due to unintentional carbon monoxide poisoning, 2000–2021: results from the Global Burden of Disease Study 2021. *The Lancet Public Health*.
- Tamakloe, R., Adanu, E., Atandzi, J., **Das, S.,** Lord, D., and Park, D. Stability of factors influencing walking-along-the-road pedestrian injury severity outcomes under different lighting conditions: A random parameters logit approach with heterogeneity in means and out-of-sample predictions. *Accident Analysis & Prevention*.
- Hossain, A., Sun, X., Alam, S., **Das, S.,** and Skeykhfard, A. Crash Contributing Factors and Patterns Associated with Fatal Truck-involved Crashes in Bangladesh: Findings from Text Mining Approach. *Transportation Research Record (in press).*
- 147 2023 Rahman, M., **Das, S.,** Codjoe, J., Kong, X., Hossain, A., & Sun, X. Using Cluster Correspondence Analysis to Explore Attribute Associations in Pedestrian-Involved Hit-And-Run Crashes. *Transportation Research Record.*
- Tamakloe, R., **Das, S.,** Adanu, E., & Park, D. Key factors affecting motorcycle-barrier crash severity: an innovative cluster-regression technique. *Transportmetrica A: Transport Science*.
- Das, S., Khodadadi, A.\*, & Liu, J. Short-Duration Crash Modeling to Understand the Impact of Operating Speed on Freeway Crashes During COVID-19. *Transportation Research Record.*
- 144 2023 Al-Gharabi, A., Zubaidi, H., & **Das, S.** A scientometric analysis and bibliometric review of driver injury severity crash studies. *Al-Qadisiyah Journal for Engineering Sciences.* Vol 16(1).
- 143 2023 Das, S., & Zubaidi, H. City transit rider tweets: Understanding sentiments and politeness. *Journal of Urban Technology*. Vol 30(1).
- 142 2023 Kutela, B., **Das, S.,** & Sener, I. Exploring the Shared Use Pathway: A Review of the Design and Demand Estimation Approaches. *Urban, Planning and Transport Research.* Vol 11(1).
- Sheykhfard, A., Haghighi, F., **Das, S.,** & Fountas, G. Evasive actions to prevent pedestrian collisions in varying space/time contexts in diverse urban and non-urban areas. *Accident Analysis & Prevention*.
- 140 2023 **Das, S.,** Kutela, B., & Menon, N. Unlocking the narrative: using text mining to reveal the hidden factors behind suicide related traffic crashes. *Archives of Suicide Research.*
- 139 **Das, S.,** Dutta, A., Tamakloe, R., & Khan, M. Analyzing the time-varying patterns of contributing factors in work zone-related crashes. *Journal of Transportation Safety & Security*.

Subasish Das Resume Page 10 of 24

- Sheykhfard, A., Haghighi, F., Papadimitriou, E., **Das, S.,** & Gelder, P. Exploring the Influence of Signal Countdown Timers on Driver Behavior: An Analysis of Pedestrian–Vehicle Conflicts at Signalized Intersections. *Transportation Research Record*.
- 137 2023 **Das, S.,** Kong, X., Wei, Z. \*, Xiao, X., Mills, D. \*, & Hossain, A. Probing into Driver Speeding Patterns and Their Influence on Child Occupancy in Urban Areas. *Transportation Research Record.*
- 136 2023 Das, S., Hossain, A., Rahman, M., Sheykhfard, A., & Kutela, B. Case Study on the Traffic Collision Patterns of E-Scooter Riders. *Transportation Research Record.*
- 135 2023 Hossain, M., Zhou, H., & **Das, S.** Data mining approach to explore emergency vehicle crash patterns: A comparative study of crash severity in emergency and non-emergency response modes. *Accident Analysis* & Prevention.
- 134 2023 Kutela, B., Msechu, K., Kidando, E., **Das, S.,** & Kitali, A. Eliciting the influence of roadway and traffic conditions on hurricane evacuation decisions using regression-content analysis approach. *Travel Behaviour and Society*.
- Das, S., Sheykhfard, A., Liu, J. \*, & Khan, M. Understanding non-motorists' views on automated vehicle safety through Bayesian network analysis and latent dirichlet allocation. *International Journal of Transportation Science and Technology.*
- 132 2023 Kong, X., Zhang, Y., Chen, X., **Das, S.,** & Sheykhfard, A. Case Study on the Relationship Between Socio-Demographic Characteristics and Work-from-Home Behavior Before, During, and After the COVID-19 Pandemic. *Transportation Research Record*.
- Sheykhfard, A., Haghighi, F., & **Das, S.** How does talking with passengers threatens pedestrian life? An analysis of drivers' performance based on real-world driving data. *Transportation Research Part F: Traffic Psychology and Behaviour.* Vol 95.
- 130 2023 Das, S., Hossein, A., Vierkant, V., & Liu, J\*. Using Bidirectional Encoder Representations from Transformers (BERT) to Classify Traffic Crash Severity Types. Natural Language Processing. Vol 3.
- 129 2023 Rahman, M., **Das, S.,** Codjoe, J., Mitran, E., Sun, X., Abedi, K., & Hossain, M. Applying Data Mining Methods to Explore Animal-Vehicle Crashes. *Transportation Research Record.*
- 128 2023 **Das, S.,** Vierkant, V., Gonzalez, J., Kutela, B., & Sheykfard, A. Bayesian Network for Motorcycle Crash Severity Analysis. *Transportation Research Record*.
- 127 2023 Hasan, A., Jalayer, M., **Das, S.,** & Kabir, M. Application of Machine Learning Models and SHAP to Examine Crashes Involving Young Drivers in New Jersey. *International Journal of Transportation Science and Technology*.
- 126 2023 Das, S., Khodadadi, A., & Liu, \*J. Scientometric and Bibliographic Analysis of Pedestrian Safety Research. Transportation Research Record.
- 125 2023 Mahdi, A., Zubaidi, H., & **Das, S.** A scientometric analysis and bibliometric review of driver injury severity crashes studies. *Al-Qadisiyah Journal for Engineering Sciences*.
- 124 2023 **Das, S.,** Hossain, A., Le, M., Pratt, M., & Wu, J. Classifying Pedestrian Maneuver Types Using the Advanced Language Model. *Transportation Research Record: Journal of the Transportation Research Board.*
- Das, S., Tamakloe, R., Zubaidi, H., Obaid, I., & Rahman, M. Bicyclist injury severity classification using a random parameter logit model. *International Journal of Transportation Science and Technology*.
- 122 2023 **Das, S.,** Rahman, M., Kabir, N. \*, Oviedo-Trespalacios, O., Dey, K., & Hossain, M. Do people act differently while using ridesharing services with children? *Transportation Research Part A: Policy and Practice*, Vol 171.
- Wei, Z. \*, **Das, S.,** Wu, Y., Li, Z., & Zhang, Y. Modelling the Lagged Impacts of Hourly Weather and Speed Variation Factors on the Segment Crash Risk of Rural Interstate Freeways: Applying a Space-Time-Stratified Case-Crossover Design. SSRN Electronic Journal.
- Hossain, A., Sun, X., Thapa, R., Hossain, M., **Das, S.** Exploring association of contributing factors to pedestrian fatal and severe injury crashes under dark-no-streetlight condition. *LATSS Research*.
- Rahman, M., Dey, K., Pyrialakou, V., **Das, S.** Factors influencing safety perceptions of sharing roadways with autonomous vehicles among vulnerable roadway users. *Journal of Safety Research*
- Sheykhfard, A., Haghighi, F., Fountas, G., **Das, S.,** Khanpour, A. How do driving behavior and attitudes toward road safety vary between developed and developing countries? Evidence from Iran and the Netherlands. *Journal of Safety Research*.
- 117 2023 Rahman, M., **Das, S.**, Sun, X. Understanding the drowsy driving crash patterns from correspondence regression analysis. *Journal of Safety Research*. Vol 84.
- Dey, K., Rahman, M., **Das, S.,** Williams, A. Left turn phasing selection considering vehicle to vehicle and vehicle to pedestrian conflicts. *Journal of Traffic and Transportation Engineering.* Vol 10(1).

Subasish Das Resume Page 11 of 24

- Weng, Y., Das, S., Paal, S. Applying Few-Shot Learning in Classifying Pedestrian Crash Typing. Transportation Research Record: Journal of the Transportation Research Board.
- 114 2023 **Das, S.,** Tabesh, M., Dadashova, B., Dobrovolny, C. Diagnosis of Encroachment-Related Work-Zone Crashes by Applying Pattern Recognition. *Transportation Research Record: Journal of the Transportation Research Board.*
- 113 2022 **Das, S.,** M. Le, A. Hossein, D. Wu, and M. Pratt. Classifying Pedestrian Maneuver Types using Advanced Language Model. *Transportation Research Record: Journal of the Transportation Research Board (in press).*
- Hosseini, P., Khoshsirat, S., Jalayer, M., **Das, S.**, and Zhou, H. Application of Text Mining Techniques to Identify Actual Wrong-Way Driving (WWD) Crashes in Police Reports. International Journal of Transportation Science and Technology.
- 111 2022 Rahman, M., **S. Das**, and Sun, X. Using Cluster Correspondence Analysis to Explore Rainy Weather Crashes in Louisiana. *Transportation Research Record : Journal of the Transportation Research Board.* Vol 2676(8).
- 110 2022 **Das, S.**, Tamakloe, R., Kutela, B., and Hossain, A. Pattern Recognition from Injury Severity Types of Frontage Roadway Crashes. *Journal of Transportation Safety and Security*.
- 109 2022 Rahman, M., S. Das, Sun, X., Sun, M., and Hossain, M. Using Unsupervised Learning to Investigate Injury-Associated Factors of Animal-Vehicle Crashes. *International Journal of Injury Control and Safety Promotion*.
- 108 2022 Rahman, S., **S. Das**, and Sun, X. Single-Vehicle Run-Off Road Crashes Because of Cellphone Distraction: Finding Patterns with Rule Mining. *Transportation Research Record: Journal of the Transportation Research Board.*
- 107 2022 **Das, S.,** Kong, X., and Hossain, M. Exploration on Prior Driving Modes for Automated Vehicle Collisions. *International Journal of Urban Sciences*. Vol 177.
- 106 2022 Sohrabi, S., Y. Wang, S. Das, and S. Paal. Safe Route-Finding: A Review of Literature and Future Directions. Accident Analysis and Prevention Vol. 177.
- 105 2022 Kong, X., **Das, S.**, Zhang, Y., Wu, L., and Wallis, J. In-Depth Understanding of Pedestrian–Vehicle Near-Crash Events at Signalized Intersections: An Interpretable Machine Learning Approach. *Transportation Research Record: Journal of the Transportation Research Board.*
- 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*.
- 103 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*.
- 102 2022 **Das, S.,** and Sarkar, S. News Media Mining to Explore Speed-Crash-Traffic Association During COVID-19. *Transportation Research Record: Journal of the Transportation Research Board.*
- 101 2022 Das, S., Aman, J. and Rahman, A. Content Analysis on Homelessness Issues at Airports by News Media Mining. Transportation Research Record: Journal of the Transportation Research Board.
- 100 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*. Vol 23(7).
- 99 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*.
- 98 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.
- 97 2022 Tamakloe, R., Sam, E., Bencekri, M., Das, S., Park, D. Young Drivers and Cellphone Distraction: Pattern Recognition from Fatal Condition Roads Considering Different Lighting Status. Traffic Injury Prevention.
- 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*.
- 95 2022 Wei, Z.\*, **S. Das**, and Y. Zhang. Short Duration Crash Prediction for Rural Two-lane Roadways: Applying Explainable Artificial Intelligence. *Transportation Research Record: Journal of the Transportation Research Board.*
- 94 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: Journal of the Transportation Research Board.*

Subasish Das Resume Page 12 of 24

- 93 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.
- 92 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.
- 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.
- 90 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.
- 89 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.
- **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.
- 87 **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.
- 86 2022 Kong, X., Zhang, A., Xiao, X., **Das, S.,** Zhang, Y. Work from Home in the Post-COVID World. Case Studies on Transport Policy.
- 85 2022 Kong, X., Li, Z., Zhang, Y., **Das, S.** Bridge Deck Deterioration: Reasons and Patterns. *Transportation Research Record: Journal of the Transportation.*
- 84 2021 **Das, S.,** Mousavi, S., Shirinzad, M. Pattern Recognition in Speeding Related Motorcycle Crashes. *Journal of Transportation Safety & Security*. pp. 1-18.
- 83 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.
- 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.
- 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.
- 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.
- 79 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.
- 78 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).
- 77 2021 **Das, S.,** A. Dutta, and M. Rahman. Pattern Recognition from Light Delivery Vehicle Crash Characteristics. *Journal of Transportation Safety & Security*. pp. 1-19.
- 76 2021 Das, S., K. Dey, and M. Rahman. Pattern Recognition from Cyclist Under Influence (CUI) Crash Events. Journal of Substance Use. pp. 1-6.
- 75 2021 Kong, X. \*, **S. Das**, and Y. Zhang. Mining Patterns of Near-Crash Events with and Without Secondary Tasks. *Accident Analysis & Prevention*. Vol 157.
- 74 **Das, S.** Autonomous Vehicle Safety: Understanding Perceptions of Pedestrians and Bicyclists. *Transportation Research Part F: Traffic Psychology and Behavior.* Vol 81, pp. 41-54.
- 73 **Das, S.**, Z. Wei\*, X. Kong\*, and X. Xiao\*. Mining Crowdsourced Data on Bicycle Safety Critical Events. *Transportation Research Interdisciplinary Perspectives*. Vol 10.
- 72 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.
- 71 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.
- 70 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.

Subasish Das Resume Page 13 of 24

- 69 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.
- 68 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.
- 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.
- 66 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.
- 65 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.
- 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.
- 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.
- Das, S., and Dutta, A. Twelve Years of Transportation Annual Meeting Hashtag: Implications for Networking and Research Trends. *Transportation Research Record: Journal of the Transportation Research Board.* Vol. 2676(1), pp. 763-772.
- Das, S., Dutta, A., and Tsapakis, I. Topic Models from Crash Narrative Reports of Motorcycle Crash Causation Study. *Transportation Research Record: Journal of the Transportation Research Board*. Vol 2675(9), pp. 449-462.
- 60 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.
- 59 **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.
- Das, S., A. Dutta, and S. Geedipally. Applying Bayesian Data Mining to measure the Effect of Vehicular Defects on Crash Severity. *Journal of Transportation Safety & Security*. Vol 13(6).
- 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.
- 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.
- 55 **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.
- 54 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.
- 53 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.
- 52 **Das, S.** Traffic Volume Prediction in Low-Volume Roadways: Cubist Approach. *Transportation Planning and Technology*. Vol 44(1), pp. 93-110.
- 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.
- 50 **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.
- 49 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.
- 48 2020 **Das, S.** Identifying Key Patterns in Motorcycle Crashes: Findings from Taxicab Correspondence Analysis. *Transportmetrica A: Transport Science*. Vol 17(4), pp. 593-614.
- 47 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.

Subasish Das Resume Page 14 of 24

- 46 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.
- 45 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.
- 44 2020 Das, S., and A. Dutta. Extremely Serious Crashes on Urban Roadway Networks: Patterns and Trends. LATSS Research. Vol 44(3), pp. 248-252.
- 43 2020 **Das, S.,** and L. White. Rural Speed Safety X: Interactive Decision Support Tool to Improve Safety, SoftwareX. Vol. 11.
- 42 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).
- 41 2020 **Das, S.,** and G. Griffin. Investigating the Role of Big Data in Transportation Safety. *Transportation Research Record: Journal of the Transportation Research Board.* Vol. 2674(6), pp. 244-252.
- 40 **Das, S.,** Dutta, A., Tsapakis, I. Automated Vehicle Collisions in California: Applying Bayesian Latent Class Model. *IATSS Research*. Vol 44(4), pp. 300-308.
- 39 **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.
- 38 2020 **Das, S.,** Islam, M., Dutta, A., and Shimu, T\*. Uncovering Deep Structure of Determinants in Large Truck Fatal Crashes. *Transportation Research Record: Journal of the Transportation Research Board.* Vol 2674(9), pp. 742-754.
- 37 2020 Geedipally, S., **Das, S.,** Pratt, M., and Lord D. Determining Skid Resistance Needs on Horizontal Curves for Different Levels of Precipitation. *Transportation Research Record: Journal of the Transportation Research Board.* Vol 2674(9), pp. 358-370.
- 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.
- 35 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.
- 34 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.
- 33 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*.
- 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. *LATSS Research*. Vol 44(2), pp. 85-93.
- 31 **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.
- 30 **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.
- 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

Subasish Das Resume Page 15 of 24

- 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.
- 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 Research Board.* Vol 2673(8), pp. 242-253.
- 20 2018 Das, S., A. Dutta, Kong, X.\*, and Sun, X. Hit and Run Crashes: Knowledge Extraction from Bicycle Involved Crashes using First and Frugal Tree. *International Journal of Transportation Science and Technology*. Vol 8(2), pp. 146-160.
- 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.
- 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 **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.
- 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 **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.
- Das, S., B. Brimley, T. Lindheimer, and M. Zupancich\*. Association of Reduced Visibility with Crash Outcomes. *LATSS Research*. Vol. 42(3), pp. 143-151.
- 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.
- 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.
- **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.
- 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.

Subasish Das Resume Page 16 of 24

## Magazine Article

- 9 2023 **Das, S.** TCRP Synthesis 156: How Do Transit Agencies Use Social Media? TR News.
- 8 2022 Fitzpatrick, K., A. Do, **S. Das**, R. Avelar, and M. Pratt. Improving Pedestrian Safety at Signalized Intersections: Impacts of Corner Radius. *ITE Journal*. Vol. 92(6).
- 7 2021 **Das, S.,** and H. Zubaidi\*. Last Forty Years of ITE Journal Articles: A Scientometric Overview. *ITE Journal Online Exclusive*.
- 6 2021 **Das, S.** Data Dive into Transportation Research Record Articles: Authors, Coauthorships, and Research Trends. *TR News.* Iss. 331, pp. 25-31.
- 5 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.
- 4 2019 Jalayer, M. O'Connell, M., Zhou, H., **Das, S.** Application of Unmanned Aerial Vehicles. *ITE Journal*. Vol 89(7), pp. 36-42.
- 3 2019 McCourt, R., K. Fitzpatrick, P. Koonce, and **S. Das.** Speed Limits: Leading to Change. *ITE Journal*, Vol 89(4), pp. 38-43.
- 2 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.
- 1 2019 **Das, S.** #TRBAM: Social Media Interactions from Transportation's Largest Conference. TR News, Iss. 324, pp. 18-23.

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

- 4 2021 **Das, S.,** Zubaidi, H. Autonomous Vehicles and Pedestrians: A Case Study of Human Computer Interaction. International Conference on Human-Computer Interaction.
- 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).
- 2 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.
- 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.]

- Das, S., Tipsword, J., and Ktela, B. Unlocking Urban Sentiments about 15-Min City through Hashtags. ASCE International Conference on Transportation and Development, Atlanta, Georgia, June 15-18.
- 63 2024 Kutela, B., Li, S., **Das, S.,** and Liu, J. Is ChatGPT a Reliable Source of Transportation Equity Information for Scientific Writing? ASCE International Conference on Transportation and Development, Atlanta, Georgia, June 15-18.
- 62 2024 **Das, S.** Mapping Communication Patterns of Transit Agencies on Social Media. ASCE International Conference on Transportation and Development, Atlanta, Georgia, June 15-18.
- 61 2024 **Das, S.**, Chakraborty, R., and Mimi, M. Unraveling Crash Causation: A Deep Dive into Non-Motorists on Personal Conveyance. ASCE International Conference on Transportation and Development, Atlanta, Georgia, June 15-18.
- 60 2024 **Das, S.**, Hossain, A., Barua, S., Kavianpour, S., and Sheykhfard A. Causal Insights into Speeding Crashes. ASCE International Conference on Transportation and Development, Atlanta, Georgia, June 15-18.
- 59 2024 **Das, S.**, and Kutela, B. Delivering Tomorrow: Analyzing Automated Delivery Vehicle Narratives through Media Mining. ASCE International Conference on Transportation and Development, Atlanta, Georgia, June 15-18.
- 58 2023 Al-Gharabi, A., Zubaidi, H., and **Das, S.** Traffic Safety Risk Assessment for Selected Roads in Al-Qadisiyah Province. IOP Conference Series: Earth and Environmental Science.
- 57 2023 **Das, S.**, A. Hossein, V. Vierkant\*, and Jinli Liu. Using Bidirectional Encoder Representations from Transformers (BERT) to Classify Traffic Crash Severity Types. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.

Subasish Das Resume Page 17 of 24

- Rahman, M., S. Das, J. Codjoe, E. Mitran, M. Sun, M. Hossain, and X. Sun. Using association rule mining in investigating animal-related injury and non-injury crashes on Louisiana roadways. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 55 2023 Rahman, M., **S. Das**, J. Codjoe, X. Kong, A. Hossain, and X. Sun. Using Cluster Correspondence Analysis to Explore Attribute Associations in Pedestrian-Involved Hit-And-Run Crashes. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 54 2023 Das, S., and J. Gonzalez. Encroachment-related Work zone Crash Injury Analysis using Data-driven Bayesian Network. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 53 2023 **Das, S.,** X. Kong, and A. Dutta. Do Patterns of Contributing Factors differ Temporarily in Work Zone related Crashes? The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 52 2023 Tamakloe, R., **S. Das**, and D. Park. Risk Factors Affecting Motorcycle-Barrier Crashes and Injury Severities: Insights from an Innovative Cluster-Regression Technique. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 51 2023 Hossain, M., H. Zhou, A. Hossain, **S. Das**, and X. Sun. Crashes involving distracted pedestrians: Exploring association of contributing factors by pedestrian injury severity and modes of distraction. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 50 2023 Khodadadi, A., I. Tsapakis, M. Shirazi, **S. Das**, and D. Lord. Empirical Bayes estimate of the Negative Binomial-Lindley model applicable to all Poisson-compound distributions used in traffic safety. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 49 2023 Wei, Z., **S. Das**, Y. Wu, Z. Li, and Y. Zhang. Investigating the exposure-lag-response association of hourly weather and speed variation factors on rural freeway crash risk: A space-time-stratified case-crossover study. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 48 2023 **Das, S.**, H. Zubaidi, I. Obaid, A. Hasan, and M. Jalayer. Applying Advanced Dimension Reduction Method to Identify Risk Clusters associated with Novice Bicyclists. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 47 2023 **Das, S.**, Y. Weng, and S. Paal. Applying Few-Shot Learning in Classifying Pedestrian Crash Typing. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 46 2023 Rahman, M., **S. Das**, J. Codjoe, M. Hossain, and X. Sun. Identifying Attribute Associations in Fatal Speeding Crashes with Latent Class Clustering and Association Rule Mining. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 45 2023 **Das, S.**, V. Vierkant\*, and J. Gonzalez\*. A Bayesian Network for Motorcycle Crash Severity Analysis. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 44 2023 Das, S., and A. Khodadadi. Short-duration Crash Modeling to Understand Impact of Operating Speed on Freeway Crashes during COVID-19. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 43 2023 **Das, S.**, M. Rahman, K. Dey, N. Kabir, A. Sheykhfard, and R. Tamakloe. Qualitative Analysis of Urban Air Mobility as a Disruptive Technology. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 42 2023 **Das, S.**, M. Le, A. Hossein, D. Wu, and M. Pratt. Classifying Pedestrian Maneuver Types using Advanced Language Model. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12
- 41 2023 Hossain, A., X. Sun, S. Alam, and **S. Das**. Crash Contributing Factors and Patterns Associated with Fatal Truck-involved Crashes in Bangladesh: Findings from Text Mining Approach. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 40 2023 Hossain, A., X. Sun, S. Islam, M. Rahman, and S. Das. Exploring Association Knowledge in Single-Vehicle Roadway Departure Crashes on Curved Segment of Rural Two-lane Highways. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 39 2023 Kavianpour, S., F. Haghighi, A. Sheykhfard, G. Fountas, and **S. Das**. Effectiveness of Traffic Calming Zone in Crash Prone Areas: a Case Study in Iran. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 38 2023 Fitzpatrick, K., R. Avelar, S. Das, M. Pratt, M. Le, and S. Venglar. Quantifying How Much Key Factors Influence Freeway Operational. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.
- 37 2023 Hasan, A., M. Jalayer, **S. Das**, and M. Kabir. Application of Machine Learning Models and SHAP to Examine Crashes Involving Young Drivers in New Jersey. The 102nd Transportation Research Board Annual Meeting, Washington D.C., Jan 8-12.

Subasish Das Resume Page 18 of 24

- 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.
- 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.**, <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.
- 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.
- 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.
- 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.

Subasish Das Resume Page 19 of 24

- 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 B. Bommanayakanahalli\*. Improper Passing related Crashes: Identifying Patterns using Negative Binomial Precise Rules. The 7<sup>th</sup> 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 **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.
- 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 95<sup>th</sup> 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 94<sup>th</sup> 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.
- 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

- 22 2022 Autonomous Delivery Vehicle as a Disruptive Technology: How to Shape the Future with a Focus on Safety? SafeD Virtual Webinar. October 22.
- 21 2022 Texas based Safety Research Projects. Virtual Webinar, UTSA. April 21.
- 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.

Subasish Das Resume Page 20 of 24

- 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.
- 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**

- 2025 Interview on Motor Vehicle Safety Inspection. Marketplace. https://www.marketplace.org/2025/02/10/do-safety-inspections-make-your-car-safer-or-put-your-wallet-at-risk/
- 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/
- 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/
- 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/
- A detailed interview is featured in Traffic Technology International September Issue. https://tti.mydigitalpublication.co.uk/publication/?i=672384
- 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.
- 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

6 2024 CE 7393: AI in Civil Engineering 5 2024 CE 4362: Traffic Engineering

Subasish Das Resume Page 21 of 24

4	2022	ENGR 5363: Infrastructure Safety Engineering, Fall 2023, Texas State University
3	2022-25	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**

- Teaching Assistant of graduate level course 'Highway Safety Fundamental Course' at UL Lafayette.
- 2 Teaching Assistant of graduate level course 'Highway Safety Fundamental Course' at UL Lafayette. 2012
- Teaching Assistant of graduate level course 'Highway Safety Fundamental Course' at UL Lafayette. 1 2011

#### RESEARCH MENTORING

## **Dissertation Supervision**

1. Committee Member, Using Real-Time Ground Truth Data to Assess Estimated Air Pollution on Transportation Routes in the Greater Austin, Texas Area. Ph.D. Dissertation of David Mills, Geography, TXST, 2022.

# Thesis Supervision

- 10. Committee Member, Investigating the Impact of Covid-19 on Mobility Condition. M.S. Thesis of Sandip Acharya, Transportation Engineering, Texas Southern University, 2022.
- 9. Committee Member, Geo-informed Deep Learning for Spatial Downscaling of Solute Transport in Heterogeneous Porous Media. M.S. Thesis of Nikhil Pawar, Civil Engineering, TXST, 2022.
- 8. Committee Member, Predicting Critical Shear Stress of Riverbed Soils with Plasticity. M.S. Thesis of Muhammad Tasnim Alam, Civil Engineering, TXST, 2022.
- 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, Civil Engineering, TAMU, 2021
- 6. Committee Member, Vehicle Category Classification based on GPS Trajectory Data, M.S. Thesis of R. Wang, Computer Science, TAMU, 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, Civil Engineering, UL Lafavette, 2016.
- 4. Mentor, Development of Crash Prediction Models for Transportation Planning Analysis, M.S. Thesis of N. Broussard, Civil Engineering, UL Lafayette, 2015.
- 3. Mentor, Estimating Annual Average Daily Traffic for Non-State Roads in Louisiana, M.S. Thesis of C. W. LeBoeuf, Civil Engineering, UL Lafayette, 2014.
- 2. Mentor, Analyzing the Safety Impact of Crash-Prone Drivers in Louisiana, M.S. Thesis of F. Wang, Civil Engineering, UL Lafayette, 2013.
- 1. Mentor, Safety Effectiveness of Raised Pavement Markers, M.S. Thesis of S. Rasel, Civil Engineering, UL Lafayette, 2012.

# Postdoctoral Research Associates

Jinli Liu, TXST (Jan 2025- June 2025) Ahmed Hossain, TXST (2024- February 2025) Gian Antariksa, TXST (Jan 2023- December 2024) Md. Nasim Khan, TXST (2022-2023)

#### PhD Students

Shriyank Somvanshi, MSEC, TXST (2023-current) M M Mahabubur Rahman, Computer Science, TXST (2023) Jinli Liu, Geography, TXST (2022-current) David Mills, 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)

Subasish Das Resume Page 22 of 24

#### M.S. Students

Tausif Islam Chowdhury, Civil Engineering, TXST (2025-current)

Sazzad Bin Bashar Polock, Civil Engineering, TXST (2024-current)

Anannya Ghosh Tusti, Civil Engineering, TXST (2024-current)

Md Monzurul Islam, Civil Engineering, TXST (2024-current)

Rawand Almadi, Civil Engineering, TXST (August 2024-December 2024)

Michael Starewich, Mathematics, TXST (2024-current)

Rohit Chakraborty, Civil Engineering, TXST (2023-current)

Mahmuda Sultana Mimi, Civil Engineering, TXST (2023-current)

Syed Aaqib Javed, Civil Engineering, TXST (2023-current)

Swastika Barua, Civil Engineering, TXST (2023-current)

Monire Jafari, Data Analytics and Information Systems, TXST (2023-Jan, 2025)

Catalina Gonzalez, Civil Engineering, TXST (2023)

Chandrika Reddy Kamjula, Data Analytics and Information Systems, TXST (2022)

Janakiram Saripalli, Computer Science, TXST (2022)

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)

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)

# **Undergraduate Students**

Nick Hardin, Computer Science, TXST (2024)

Jett Tipsword, Computer Science, TXST (2023-current)

Darrel Anderson, Civil Engineering, TXST (2023-current)

Khaled Aly Abousabaa, Civil Engineering, TXST (2023-current)

Diana Mendez Garcia, Civil Engineering, TXST (2023-current)

Manan Patel, Civil Engineering, TXST (2023)

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)

Lv-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)

Subasish Das Resume Page 23 of 24

Richard Padilla, Computer Science and Engineering, TAMU (2018-2019) Daxton Davidson, Civil Engineering, TAMU (2018) Michelle Zupancich, Civil Engineering, TAMU (2016)

(last updated: 10 February, 2025)

Subasish Das Resume Page 24 of 24