Publication Details

Journal Publications

1. **Gupta A**., Choudhary P, Parida M..Analyzing Lane Change Execution Behaviour on Expressway Using an Instrumented Vehicle: A Random effect Accelerated Failure Time (AFT) approach **IEEE Transactions on Intelligent Transportation Systems** DOI: 10.1109/TITS.2024.3436569

2. **Gupta, A**., Choudhary, P., Parida, M., 2024. Examining risky driving behaviours : A comparative analysis of SUVs and other car types. **Transport Policy** 152, 9–20. https://doi.org/10.1016/j.tranpol.2024.04.012

3. **Gupta, A**., Choudhary, P. and Parida, M., 2021. Understanding and modelling risky driving behaviour on high-speed corridors. **Transportation Research Part F: Traffic Psychology and Behaviour**, 82, pp.359-377.
   https://doi.org/10.1016/j.trf.2021.09.009

4. **Gupta A.,** Shreyansh, Choudhary P, Parida M. 2024. Dynamic Object Detection Using Sparse Lidar Data For Autonomous Machine Driving And Road Safety Applications. **Expert System with Application**, 255, Part B, 124636 https://doi.org/10.1016/j.eswa.2024.124636

5. **Gupta A**., Choudhary P, Parida M. Unveiling Gap Acceptance Behavior during Lane change with EDIV data: A Deep Dive into Driving Behaviour on Expressway using A Three Level Mixed Effect Linear Regression Approach **IATSS** https://doi.org/10.1016/j.iatssr.2024.07.003

6. **Gupta A**., Shreyansh, Choudhary P, Parida M. Development of Real-Time Lane Departure Warning System for Varying Severity Levels Using Sparse 3D-LiDAR Sensor. **Transportation Research Record** https://doi.org/10.1177/03611981241277752

7. **Gupta, A**., Bivina, G.R., Parida, M., 2022. Does neighborhood design matter for walk access to metro stations? An integrated SEM-Hybrid discrete mode choice approach. **Transport Policy** 121, 61–77. https://doi.org/10.1016/j.tranpol.2022.03.010

8. Choudhary, P., **Gupta, A**., Velaga, N.R.: Perceived risk vs actual driving performance during distracted driving: A comparative analysis of phone use and other secondary distractions. **Transportation Research Part F: Traffic Psychology and Behaviour**. 86, 296–315 (2022). https://doi.org/10.1016/j.trf.2022.03.001

9. Bivina, G.R., **Gupta, A.** and Parida, M., 2019. Influence of microscale environmental factors on perceived walk accessibility to metro stations. **Transportation Research Part D: Transport and Environment**, 67, pp.142- 155 https://doi.org/10.1016/j.trd.2018.11.007

10. Bivina, G.R., **Gupta, A**. and Parida, M., 2020. Walk Accessibility to Metro Stations: An analysis based on Meso-or Micro-scale Built Environment Factors. **Sustainable Cities and Society**, 55, p.102047 https://doi.org/10.1016/j.scs.2020.102047

11. Chauhan, V., **Gupta, A**. and Parida, M., 2021. Demystifying Service Quality of Multimodal Transportation Hub (MMTH) through Measuring Users' Satisfaction of Public Transport. **Transport Policy**,102, p.47-60.

    https://doi.org/10.1016/j.tranpol.2021.01.004

12. Chauhan, V., **Gupta A**., and Parida M. 2022. "Evaluating Service Quality of Multimodal Transportation Hub (MMTH) in Delhi, India: A Gender-Based Perspective." **Case Studies on Transport Policy** 10 (April). Elsevier Ltd: 1234–1248. doi:10.1016/j.cstp.2022.04.007

13. Kumar, A., **Gupta, A**., Parida, M., & Chauhan, V. (2022). Service quality assessment of ride-sourcing services : A distinction between ride-hailing and ride-sharing services. **Transport Policy**, 127(August 2021), 61–79. https://doi.org/10.1016/j.tranpol.2022.08.013

14. Chauhan, V., **Gupta, A.**, Parida, M. Do users ' characteristics really influence the perceived service quality of Multimodal Transportation Hub (MMTH)? An association rules mining approach. **Multimodal Transportation**. 2, 100069 (2023). https://doi.org/10.1016/j.multra.2023.100069

15. Yadav, R. K., **Gupta, A**., Choudhary, P., & Parida, M. (2024). Enhancing urban mobility: comparative analysis of improvement priorities for conventional and electric buses in Kathmandu city. **Sustainable Transport and Livability**, 1(1). https://doi.org/10.1080/29941849.2024.2347389

16. Barbieri, D.M., Lou, B., Passavanti, M., Hui, C., Hoff, I., Lessa, D.A., Sikka, G., Chang, K., **Gupta, A**., Fang, K., Banerjee, A., Maharaj, B., Lam, L., Ghasemi, N., Naik, B., Wang, F., Foroutan Mirhosseini, A., Naseri, S., Liu, Z., Qiao, Y., Tucker, A., Wijayaratna, K., Peprah, P., Adomako, S., Yu, L., Goswami, S., Chen, H., Shu, B., Hessami, A., Abbas, M., Agarwal, N., Rashidi, T.H. (2021).: Impact of COVID-19 pandemic on mobility in ten countries and associated perceived risk for all transport modes. **PLoS One**. 16(2): e0245886. https://doi.org/10.1371/journal.pone.0245886

17. Maria, D., Lou, B., Passavanti, M., Hui, C., Antunes, D., Maharaj, B., Banerjee, A., Wang, F., Chang, K., Naik, B., Yu, L., Liu, Z., Sikka, G., Tucker, A., Foroutan, A., Naseri, S., Qiao, Y., **Gupta, A**., Abbas, M., Fang, K., Ghasemi, N., Peprah, P., Goswami, S., Hessami, A., Agarwal, N., Lam, L., Adomako, S. (2020)(a): A survey dataset to evaluate the changes in mobility and transportation due to COVID-19 travel restrictions in Australia , Brazil , China , Ghana , India , Iran , Italy , Norway , South Africa , United States. **Data** Br. 33, 106459. https://doi.org/10.1016/j.dib.2020.106459

18. Maria, D., Lou, B., Passavanti, M., Hui, C., Antunes, D., Maharaj, B., Banerjee, A., Wang, F., Chang, K., Naik, B., Yu, L., Liu, Z., Sikka, G., Tucker, A., Foroutan, A., Naseri, S., Qiao, Y., **Gupta, A**., Abbas, M., Fang, K., Ghasemi, N., Peprah, P., Goswami, S., Hessami, A., Agarwal, N., Lam, L.,

Adomako, S. (2020)(b): Survey data regarding perceived air quality in Australia, Brazil, China, Ghana, India, Iran, Italy, Norway, South Africa, United States before and during Covid-19 restrictions. **Data** Br. 32, 106169. https://doi.org/10.1016/j.dib.2020.106169

19. Baowen Lou, Diego Maria Barbieri, Marco Passavanti, Cang Hui, **Gupta A.**, Inge Hoff, Daniela Antunes Lessa, Gaurav Sikka, Kevin Chang, Kevin Fang, Louisa Lam, Brij Maharaj, Navid Ghasemi, Yaning Qiao, Solomon Adomako, Ali Foroutan Mirhosseini, Bhaven Naik, Arunabha Banerjee, Fusong Wang, Andrew Tucker, Zhuangzhuang Liu,Kasun Wijayaratna, Sahra Naseri, MSc; Lei Yu, Hao Chen, Benan Shu, Shubham Goswami, Prince Peprah, Amir Hessami, Montasir Abbas, Nithin Agarwal, Air pollution perception in ten countries during COVID-19 pandemic. **Ambio**, Volume 51, pages 531–545

    https://doi: 10.1007/s13280-021-01574-2

20. Yadav R., **Gupta A.**, Choudhary P, Parida M.Service Quality and Personal Attitudes as Predictors of Overall Satisfaction with Public Buses: A Case Study of Kathmandu, Nepal. (**Transportation Research Record**) https://doi.org/10.1177/03611981241257256

Conference Papers

1. **Gupta, A.**, Bivina, G.R., and Parida, M. Do Neighborhood Design Matter? An Assessment of Subjective and Objective Built Environment Factors on Access Mode Choice. (101st Annual Meeting of **Transportation Research Board**, Washington D.C., January 9-13, 2022)

2. **Gupta A.**, Choudhary P, Parida M, Assessment of Risky Driving Behavior on Expressways: An Association Rules Mining Approach. (101st Annual Meeting of **Transportation Research Board**, Washington D.C., January 9-13, 2022)

3. **Gupta A.**, Shreyansh, Choudhary P, Parida M. Towards a Systematic Approach to Detect, Classify and Track Surrounding Vehicles in Dynamic Conditions Using a Vehicle Mounted Cost-effective LiDAR Sensor on Expressways.102nd Annual Meeting of **Transportation Research Board**, Washington D.C., USA, January 8-12, 2023.

4. **Gupta A.,** Choudhary P, Parida M Modelling of Lane Change Execution Behaviour on Expressway Using an Instrumented Vehicle: A Random Parameters Accelerated Failure Time (AFT) approach 103rd Annual Meeting of **Transportation Research Board (TRB)**, Washington D.C., USA, January 7-11, 2024. (Presented)

5. **Gupta A.**, Choudhary P, Parida M, Rear-End Conflict Assessment for Daytime and Nighttime Conditions using Advanced Sensor Analytics and Extreme Value Modelling Approach (104th

Annual Meeting of **Transportation Research Board**, Washington D.C., January 9-13, 2025) (Accepted)

6. **Gupta A**., Kishore A., Choudhary P, Parida M. Dynamic Road Boundary Detection Using Sparse 3D-LiDAR in Complex Road and Environmental Conditions. (104th Annual Meeting of **Transportation Research Board**, Washington D.C., January 9-13, 2025) (Accepted)

7. **Gupta A**., Choudhary P, Parida M. Does Type of Car Really Influence Driver Behaviour? A Comparative Study of Risky Driving Behaviors between SUVs and other Types of Cars. **16th World Conference on Transport Research (WCTR)**, Montreal, Canada, from 17 to 21 July 2023

8. **Gupta, A**., Bivina, G.R. and Parida, M. Prioritising Pedestrian's Needs Around Transit Stations Through Walkability Assessment: A walk audit tool approach.**16th World Conference on Transport Research (WCTR)**, Montreal, Canada, from 17 to 21 July 2023

9. **Gupta A**., Shreyansh, Choudhary P, Parida M. Pipeline development to detect, classify and track surrounding vehicles using a single sparse LiDAR in dynamic condition. **16th World Conference on Transport Research (WCTR)**, Montreal, Canada, from 17 to 21 July 2023

10. **Gupta, A**., Bivina, G.R. and Parida, How Metros' Catchment Area Affect Commuters Choice To Walk Or Use Feeder Modes? **16th World Conference on Transport Research (WCTR),** Montreal, Canada, from 17 to 21 July 2023

11. **Gupta A**., Choudhary P, Parida M. Assessment of Risky Driving Behavior on Expressways: Association between Risk Levels, Drivers' Driving Characteristics and Demographics (Accepted in 3rd International Conference on Transportation and Development, **ASCE**, Seattle, Washington, May 31-June 3, 2022)

12. **Gupta, A**., Bivina, G.R. and Parida, M. "Measuring Impact of Objective and Subjective Built Environment Factors on Access Mode Choice to Metro Stations." World Conference on Transport Research, WCTR- 2019 held at IIT Bombay.

13. **Gupta, A**., Bivina, G.R. and Parida, M. "How Far People Can Walk to Access Metro? A Study of Access Trip Characteristics of Metro Users." **EASTS-ISC EASTS Conference**-2019 held at Colombo, Sri-lanka on 9-12 August, 2019.

14. **Gupta A**., Shreyansh, Choudhary P, Parida M, Development of Real Time Lane Departure Warning System Using Sparse 3D-Lidar Sensor. **CTRG**, 17-21 Dec. 2023 (Presented)

15. **Gupta, A**., Bivina, G.R. and Parida, M. "Assessing the Walkability around Metro Station: A Walk Audit Tool Approach." National Conference – Recent Advanced in Traffic Engineering, **RATE**, 2018 held at SVNIT Surat on 11-12 August 2018.

16. **Gupta, A**., Bivina, G.R. and Parida, M. "Access environment around Metro station: Trade-off between walk and feeder modes". **CTRG**-2021, Tiruchirappalli, India. 14-17 December, 2021.

17. Bivina G. R., **Gupta A**, Dr. M. Parida,. "Improving Pedestrians' access around metro stations in Delhi through better management of Safety & security. Presented in National Conference organised by **Central Academy of Police Training (CAPT): Bureau of Police Research and Development** on Feb 22, 2019.

18. Bivina, G.R., **Gupta, A**. and Parida, M. "Role of micro scale Built Environment Factors on Perceived walk accessibility to metro station: A case study of Delhi metro. ." EASTS-ISC **EASTS Conference-**2019 held at Colombo, Srilanka on 9-12 August, 2019.

19. Chauhan V.., **Gupta, A**. and Parida, M.Factors affecting users' perception while using Multi-Modal Transportation Hub. CTRG-2021, 14-17 December, 2021.

20. Choudhary P., **Gupta A**., Valaga N., Perceived Risk vs Actual Driving Performance during Distracted Driving: A Comparative Analysis of Phone Use and Other Secondary Distractions. (101st Annual Meeting of **Transportation Research Board**, Washington D.C., January 9-13, 2022)

21. Chauhan, V., **Gupta, A**. and Parida, M., 2021. Investigating Gender Diversification while Analyzing Service Quality of Multimodal Transportation Hub (MMTH) (101st Annual Meeting of **Transportation Research Board**, Washington D.C., January 9-13, 2022)

22. Chauhan V., **Gupta A**., Parida M. Exploring Association of users' characteristics with Service Quality of Multimodal Transportation Hub (MMTH) for ensuring seamless and sustainable mobility: A Case Study of Delhi, India. 102nd Annual Meeting of **Transportation Research Board**, Washington D.C. USA, January 8-12, 2023.

23. Yadav R., **Gupta A**., Choudhary P, Parida M. A Comparative Study on the Effects of Service Quality and Personal Attitudes on Overall Satisfaction with Public Buses: A Case Study of Kathmandu, Nepal. **16th World Conference on Transport Research (WCTR),** Montreal, Canada, from 17 to 21 July 2023

24. Yadav R., **Gupta A**., Choudhary P, Parida M. Service Quality Assessment of Electric Buses: A PLS-SEM Approach. 16th Urban Mobility India, Conference, 25th -27th Oct, 2023, New Delhi, India.

25. Shreyansh, **Gupta A**., Varghese Varun, Makoto Chikaraishi. Spatial Transferability Analysis of Choice Models with Computational Graphs. 8th **International Choice Modelling Conference**, which will be held on 1-3 April 2024 in Puerto Varas, Chile (Presented)

26. Yadav R., **Gupta A**., Choudhary P, Parida M. Evaluating Urban Transit Enhancement Strategies: Conventional vs. Electric Buses in Kathmandu City. **ASCE** International Conference on Transportation & Development (ICTD 2024) (Accepted)

27. **Gupta A**., Choudhary P, Parida M. Comprehensive analysis of gap acceptance behaviour during Lane Change maneuver on Expressways. **ASCE** International Conference on Transportation & Development (ICTD 2024) (Accepted)

28. Yadav R., **Gupta A**., Choudhary P, Parida M. Enhancing Urban Mobility: Comparative Analysis of Improvement Priorities for Conventional and Electric Buses in Kathmandu City" IATBR - 17th International Conference on Travel Behavior Research, Vienna, Austria (14-17 July, 2024)