Dr. MITHUN MOHAN

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Academic Background

1. **PhD** (July, 2013 – February, 2017) in Transportation Engineering from Indian Institute of Technology Roorkee.
2. **M. Tech** (July, 2008 – May, 2010) in Transportation Engineering from Indian Institute of Technology Roorkee.
3. **B. Tech** (July, 2004 – May, 2008) in Civil Engineering from Kerala University.

Professional Experience

No.	Designation	Organization	Duration
1	Assistant Professor	National Institute of Technology Karnataka, Surathkal	October, 2019 – Present
2	Assistant Professor	Amrita Vishwa Vidyapeetham, Coimbatore, Tamil Nadu	July, 2018 – October, 2019
3	Assistant Professor	MES College of Engineering, Kuttippuram, Kerala	August, 2017- July, 2018
4	Senior Research Fellow	Indian Institute of Technology Roorkee	May, 2013 – March, 2017
5	Assistant Professor	Heera College of Engineering & Technology, Trivandrum	January, 2012- October, 2012
6	Deputy Design Engineer	Feedback Infrastructure Pvt Ltd., Bangalore	August, 2010 – December, 2011

Academic Projects

1. PhD Thesis – “Analysis of Mixed Traffic Flow at Uncontrolled Intersections” (July 2013 - September 2016, I.I.T Roorkee)
2. M. Tech Thesis – “Development of Level of Service Criteria for Pedestrian Movements” (June 2009 - May 2010, I.I.T Roorkee)
3. M. Tech Project – “Travel Behaviour Analysis using Stated Preference Survey in Delhi” (June 2009 - September 2009, I.I.T Roorkee)

4. B. Tech Project – "Observance Study of Behavioural Characteristics of Road Users in Kollam district" (June 2007 - June 2008, T.K.M College of Engineering)

(Details are provided in Appendix – 1)

Publications

1. Radovic, D, **Mohan, M** and Bogdanovic, V. (2022). "Comparative Analysis of Critical Headway Estimation at Urban Single-Lane Roundabouts". Promet - Traffic & Transportation, 34 (2), 323-335. https://doi.org/10.7307/ptt.v34i2.3902. ***SCI Indexed***.
2. Shubhashree, K. S. and **Mohan, M**. (2022). "Investigating bus stops' influence on saturation flow at signalized intersections in heterogeneous traffic". Advances in Transportation Studies: an International Journal, Section A, 58, 213-218. **Scopus Indexed**
3. **Mohan, M** and Chandra, S. (2021). "Investigating the Influence of Conflicting Flow's Composition on Critical Gap under Heterogeneous Traffic Conditions". International Journal of Transportation Science and Technology, 10(4), 393-401. https://doi.org/10.1016/j.ijtst.2021.01.004. ***Scopus Indexed.***
4. **Mohan, M** and Chandra, S. (2020). "Capacity Estimation of Unsignalized Intersections under Heterogeneous Traffic Conditions". Canadian Journal of Civil Engineering, 47(6), 651-662. https://doi.org/10.1139/cjce-2018-0796. ***SCI Indexed***.
5. **Mohan, M.** and Chandra, S. (2020). "Influence of Major Stream Composition on Critical Gap at Two-Way Stop-Controlled Intersections - A Case Study". Transportation Letters: the International Journal of Transportation Research, 12(1), 1-8. https://doi.org/10.1080/19427867.2018.1494896. ***SCI Indexed***.
6. **Mohan, M** and Kezhuvathodi, V. (2019). "Simulation of gap acceptance at three-legged unsignalized intersections under heterogeneous traffic conditions". Advances in Transportation Studies: an International Journal, Section A, 49, 75-88. ***Scopus Indexed***.
7. Nandakumar, R and **Mohan, M**. (2019). "Analysis of traffic growth on a rural highway: A case study from India". European Transport Journal, 74. ***Scopus Indexed***.
8. **Mohan, M** and Chandra, S. (2018). "Critical Gap Estimation at Two-Way Stop-Controlled Intersections Based on Occupancy Time Data". Transportmetrica A: Transportation Science, 14(4), 316-329. http://dx.doi.org/10.1080/23249935.2017.1385657. ***SCI Indexed***.
9. **Mohan, M** and Chandra, S. (2018). "Occupancy Time-based Passenger Car Equivalents for Unsignalized Intersections in India". Current Science, 114(6), 1346-1352. http://dx.doi.org/10.18520/cs/v114/i06/1346-1352. ***SCI Indexed***.
10. **Mohan, M.** and Chandra, S. (2018). "Three Methods of PCU Estimation at Unsignalized Intersections". Transportation Letters: the International Journal of Transportation Research, 10(2), 68-74. http://dx.doi.org/10.1080/19427867.2016.1190883. ***SCI Indexed***.
11. **Mohan, M** and Chandra, S. (2017). "Queue Clearance Rate Method for Estimating Passenger Car Equivalents at Signalized Intersection". Journal of Traffic and

Transportation Engineering, 4(5), 487-495. http://dx.doi.org/10.1016/j.jtte.2016.12.003. ***Scopus Indexed***.

12. **Mohan, M.** and Chandra, S. (2016). "Concept of Queue Clearance Rate for Estimation of Equivalency Factors at Priority Junctions". Canadian Journal of Civil Engineering, 43, 593-598. http://dx.doi.org/10.1139/cjce-2015-0396. ***SCI Indexed***.
13. **Mohan, M** and Chandra, S. (2016). "Review and Assessment of Techniques for Estimating Critical Gap at Two-way Stop-controlled Intersections". European Transport Journal, 61, paper no. 8. ***Scopus Indexed***.
14. Chandra, S and **Mohan, M**. (2018). "Analysis of Driver Behaviour at Unsignalized Intersections". Journal of Indian Roads Congress, Vol. 79-2, No. 675, 5-10.
15. Rastogi, R., Chandra, S. and **Mohan, M.** (2014). "Development of Level of Service Criteria for Pedestrians". Journal of Indian Roads Congress, Vol. 75-1, No. 611, 60-69.

Conferences

1. Kumar, R and Mohan, M. (2022). "Impact of Leading Vehicles of the Queue on Saturation Flow at Signalized Intersections". 4th National Conference on Recent Advances in Traffic Engineering, SVNIT Surat.
2. Rahman, S and Mohan, M. (2022). "Reduction Of Vehicular Emission at Urban Road Junctions through Traffic Interventions". 2nd International Conference on Transportation Infrastructure Projects: Conception to Execution, IIT Roorkee.
3. Ansarsha, A and **Mohan, M**. (2022). "Investigating Accidents at a Newly Opened Highway: A Case Study from Kerala". 4th National Conference on Traffic Technology, CAPT, Bhopal.
4. Arathi. A. R., Madhavan, H and **Mohan, M**. (2021). "Machine Learning-Based Gap Acceptance Model for Uncontrolled Intersections under Mixed Traffic Conditions". 6th Conference of Transportation Research Group of India, Trichy, Paper No. 21.
5. Arathi. A. R., Madhavan, H and **Mohan, M**. (2021). " Machine Learning-Based Lag Acceptance Model and Safety Thresholds for Lag Time at Uncontrolled Intersections under Mixed Traffic Conditions". 8th Online International Conference on Transportation Systems Engineering and Management, NIT Calicut, Paper No. 133.
6. **Mohan, M.** and Chandra, S. (2019). "Influence of Conflicting Stream's Composition on Critical Gap at Unsignalized Intersections". 98th Annual Meeting of Transportation Research Board, Washington D. C. Paper no. 19-00049.
7. **Mohan, M.** and Chandra, S. (2017). "Queue Clearance Rate Method for Estimating Passenger Car Equivalents at Signalized Intersection". 96th Annual Meeting of Transportation Research Board, Washington D. C., Paper no. 17-03003.
8. **Mohan, M.** and Chandra, S. (2016). "Influence of Major Stream Composition on Critical Gap at Two Way Stop-Controlled Intersections". 95th Annual Meeting of Transportation Research Board, Washington D. C., Paper no. 16-1625.
9. **Mohan, M.** and Chandra, S. (2015). "New Methods of PCU Estimation at Unsignalized Intersections". RATE 2015, National Conference, SVNIT Surat, India.

10. Chandra, S., **Mohan, M.**, and Gates, T. J. (2014). "Estimation of Critical Gap using Intersection Occupancy Time". 19th International Conference of Hong Kong Society for Transportation Studies, Z. Leng, ed., Hong Kong, pp. 313–320.

Book Chapters

1. Arathi. A. R., Madhavan, H and **Mohan, M**. (2021). "Machine Learning-Based Gap Acceptance Model for Uncontrolled Intersections under Mixed Traffic Conditions". Lecture Notes in Civil Engineering (Proceedings of the Sixth International Conference of Transportation Research Group of India), 3-19. DOI: http://dx.doi.org/10.1007/978-981-19-3494-0_1

Articles under review

1. Sethulakshmi, G and **Mohan, M**. "Analyzing Passengers' Perceptions about Bus stop Safety: A Structural Equation Approach"
2. Arathi. A. R., Madhavan, H and **Mohan, M**. "Effect of Skew Angle on Critical Gap and Capacity at Uncontrolled Intersections under Mixed Traffic Conditions".

Funded Projects

1. "Development of Trip Generation Manual for Indian Cities" funded by CSIR-CRRI for Rs. 7.975 Lakhs as the Nodal Principal Investigator.

Awards and Fellowships

1. International Travel Grant from Science and Engineering Research Board (DST, Govt. of India) for attending the 98th Annual Meeting of Transportation Research Board (TRB), USA from13 to 17 January, 2019.
2. Council of Scientific and Industrial Research (Govt. of India) assistantship for doctoral research (2013 - 2017).
3. Ministry of Human Resource Development (Govt. of India) fellowship for post-graduate studies (2008 - 2010).

Project Guidance

Batch	Completed	On-going
PhD	-	2
MTech	6	6
BTech	6	1

Reviewer for Journals

1. Transportation Letters: the International Journal of Transportation Research
2. Journal of Transportation Safety and Security
3. Traffic Injury and Prevention

4. Journal of Advanced Transportation
5. Ain Shams Engineering Journal
6. Journal of Traffic and Transportation Engineering
7. Advances in Transportation Studies
8. Case Studies on Transport Policy

Software Packages

1. PTV Vissim (Proficient)
2. MS Office (Proficient)
3. Visual Basic (Proficient)
4. SPSS (Proficient)
5. Autocad (Proficient)
6. Matlab (Average)
7. MX Roads (Average)
8. C & C++ (Average)

Languages

1. English (Speak, Read & Write)
2. Malayalam (Mother Tongue)
3. Hindi (Speak, Read & Write)

References

1. **Prof. Satish Chandra,**
   Director, CSIR- Central Road Research Institute,
   New Delhi, India.
   satisfce@gmail.com, director.crri@nic.in

2. **Prof. Manoranjan Parida,**
   Professor, Department of Civil Engineering,
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   mparida@gmail.com, mprdafce@iitr.ac.in

3. **Prof. Praveen Kumar,**
   Director, National Institute of Technology Delhi,
   Delhi, India.
   praveenaeron@gmail.com, director@nitdelhi.ac.in

4. **Dr. Indrajit Ghosh,**
   Associate Professor, Department of Civil Engineering,
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