

Tom V. Mathew¹

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1 Introduction

Prof. Tom V. Mathew is a faculty of the Department of Civil engineering, and specialized in Transportation Systems Engineering. He is actively involved in teaching, academic research and development sponsored by the government and industry.

Dr. Mathew completed bachelor of technology in Civil Engineering from the College of Engineering, Trivandrum, in 1991. He completed the master of technology in transportation engineering from Indian Institute of Technology Madras, Chennai in 1993. In 1999 he finished the doctorate in Civil Engineering, again from Indian Institute of Technology Madras, Chennai. His doctoral research was on 'bus transit route network design using genetic algorithm'.

After the Ph.D, he worked as a senior software engineer in the Amada Software International for two years. Subsequently, in 2001, he joined as a faculty in the Department of Civil Engineering, Indian Institute of Technology Bombay, Mumbai.

His current research interests include traffic flow modeling and simulation, traffic signal control systems, transportation network design, intelligent transportation systems, and traffic safety. He is currently teaching undergraduate and post graduate courses in transportation systems engineering and supervising several post-graduate and doctoral thesis. Currently, he is also the placement head of the Institute.

2 Education

1. **Ph.D.** in Transportation Engineering, from Indian Institute of Technology Madras; thesis titled *Urban Bus Transit Route Network Design Using Genetic Algorithm*, **1999**.
2. **M. Tech.** in Transportation Engineering from Indian Institute of Technology Madras; dissertation titled *Expert Systems for Traffic Signal Design*, **1994**.
3. **B. Tech.** in Civil Engineering from College of Engineering Trivandrum, University of Kerala; project titled *Fabrication and Testing of Pre-stressed Concrete Roof Truss*, **1991**.
4. Diploma in Rail Transport Management offered by Rail Transport Institute, Government of India in **1992**.

3 Professional experience

1. **Professor** in IIT Bombay, from April 2012 - till date.
2. **Associate Professor** in IIT Bombay, from April 2007 - April 2012.
3. **Assistant Professor** in IIT Bombay, from April 2003 - April 2007 .
4. **Senior Lecturer** in IIT Bombay from July 2001 - April 2003.

¹This CV dated October 10, 2019, has 17 pages

5. **Senior Software Engineer** in Amada Soft. (India) Ltd. from June 1999 - June 2001.
6. **Senior Project Officer** in Indian Institute of Technology Madras, from February 1999 - May 1999.
7. **Research Scholar** in the Department of Civil Engineering, Indian Institute of Technology Madras, from January 1994 - January 1999.
8. **Half Time Teaching Assistant** in the Department of Civil Engineering, Indian Institute of Technology Madras, from July 1992 - December 1993
9. **Consultant Engineer** in the Service Co-Operative Bank, from March 1992 - June 1992
10. **Apprentice Trainee** in Kerala Industrial and Technical Consultancy Organization, from August 1991 - January 1992.
11. **Consultant** for the design and supervision of residential buildings, from March 1991 - August 1991.

4 Teaching

1. CE 215 Civil Engineering Drawing (2002-06)
2. CE 320 Transportation Engineering-I (2002-09)
3. CE 328 Transportation Engineering I - Laboratory (2010,11,12)
4. CE 415 Transportation Engineering II (2010,11,12)
5. CE 334 Transportation Engineering II (2018,19)
6. CE 434 Traffic Analysis and Design (2010-15)
7. CE 740 Traffic Engineering (2006-till date)
8. CE 744 Analysis of Transportation Systems (2002-06, 2016)
9. CE 753 Traffic Design and Studio (2003-09)
10. CE 774 Traffic Management and Design (2016,17)

5 List of publications

Google scholar: h-index 17, i10-index 26, citation 1838.

5.1 Chapter in book

1. S.L. Dhingra, K.V. Krishna Rao and Tom V. Mathew, Environmental impact assessment for sustainable transport, In The Handbook of Transport and the Environment, KJ Button and DA Hensher (Eds.), Elsevier Pub. 2003.
2. S Arkatkar, S Mitra, and T V Mathew, Chapter 12. Inida, in Global Practices on Road Traffic Signal Control: Fixed-Time Control at Isolated Intersections, by K Tang, M Boltze, H Nakamura, and Z Tian (Eds), Elsevier Pub. 2019.

5.2 Papers in referred journals

1. A Charly and T V Mathew, Estimation of traffic conflicts using precise lateral position and width of vehicles for safety assessment Accident Analysis and Prevention 132, 105264 2019.
2. A Charly and T V Mathew, Evaluation of driving performance in relation to safety on an expressway using field driving data, Transportation Letters, 1-9, 2019.
3. M Sreekumar, SM Joshi, A Chatterjee, T V Mathew., Analyses and implications of higher order finite volume methods on first-order macroscopic traffic flow models., Transportation Letters., 1-16., 2018.
4. J Fazio, R Shetkar, T V Mathew., Traffic evacuation time under non-homogeneous conditions., International journal of injury control and safety promotion., 24(2)., 2017.
5. VSH Bangarraju, KVR Ravishankar, and Tom V Mathew. Analysis of Lateral Distance Keeping Behaviour in Mixed Traffic Conditions with Little Lane Discipline, International Journal for Traffic and Transport Engineering., 6(4)., 2016.
6. Sushant Sharma and Tom V Mathew Developing speed dependent emission factors using on-board emission measuring equipment in India International journal of traffic and transportation, 6(3), 2016
7. Nuli, S and Mathew, T. V., Vehicle Actuated Control for Heterogeneous Traffic Using Stop Line Detection, European Transport, 57(2), 2015.
8. Tom V Mathew, Caleb Munigety and Ashutosh Bajpai, A strip-based approach for simulation of mixed traffic conditions. Journal of Computing in Civil Engineering (In press).
9. Sabyasachee Mishra, Sushant Sharma, Tom V. Mathew, and Snehamay Khasnabis, Multiobjective Optimization Model for Transit Fleet Resource Allocation, Transportation Research Record: Journal of the Transportation Research Board, No. 2351, Transportation Research Board of the National Academies, Washington, D.C., pp. 113, 2014.
10. Caleb Ronald Munigety, Vivek Vicraman, and Tom V. Mathew, Semi-automated Tool for Extraction of Micro-level Traffic Data from Videographic Survey Transportation Research Record: Journal of the Transportation Research Board, No. 2443, pp. 8895, 2014.
11. Sabyasachee Mishra, Sushant Sharma, Snehamay Khasnabis, and Tom V. Mathew, Preserving an aging transit fleet: An optimal resource allocation perspective based on service life and constrained budget, Transportation Research Part A: Policy and Practice, Volume 47, January 2013, Pages 111-123,
12. Padmakumar Radhakrishnan and Tom V Mathew, A hybrid stochastic Cellular Automata-Driver-Vehicle-Object simulation model for heterogeneous traffic at urban signalized intersections Journal of Computing in Civil Engineering, ASCE, 27(3), 254-262, 2013.
13. Jeremy Blum and Tom V Mathew, Implications of the Computational Complexity of Transit Route Network Redesign for Metaheuristic Optimization Systems, IET Intelligent Transport Systems, 6 (2), pp. 124-31, June 2012.
14. Tom V Mathew and K V R Ravishankar, Neural network based vehicle-following model for mixed traffic conditions, European Transport - Trasport Europei, 52, 1-15, 2012.
15. K V R Ravishankar and Tom V Mathew, Vehicle-type dependent car-following model for heterogeneous traffic conditions, Journal of Transportation Engineering, ASCE, 137 (11), 775-781, 2011.
16. Sushant Sharma, Tom V. Mathew and Satish Ukkusuri, Approximation Techniques for Transportation Network Design Problem under Demand Uncertainty, Journal of Computing in Civil Engineering, ASCE, 25(4), 316-329, 2011.
17. Jeremy Blum and Tom V Mathew, Intelligent Agent Optimization of Urban Bus Transit System Design, Journal of Computing in Civil Engineering, ASCE, 25 (5), pp357-369,2011

18. Sushant Sharma and Tom V. Mathew, Multiobjective network design for emission and travel-time trade-off for a sustainable large urban transportation network, *Environment and Planning B: Planning and Design*, volume 38, pages 520-538, 2011
19. P Ravikumar and Tom V Mathew, Vehicle Actuated Signal Controller For Heterogeneous Traffic Having Limited Lane Discipline, *ITE Journal*, 81(5), 44-53, May 2011.
20. Sabyasachee Mishra, Tom. V. Mathew, and Snehamay Khasnabis, A Single-Stage Integer Programming Model For Long Term Transit Fleet Resource Allocation, *Journal of Transportation Engineering ASCE*, 136 (4), 281-381, 2011.
21. Padmakumar Radhakrishnan and Tom V Mathew, Passenger car units and saturation flow models for non-lane-based heterogeneous traffic, *Transportmetrica*, 7(2), 141-162, 2011.
22. Tom Mathew and K Ravishankar, Car-following behavior in traffic having mixed vehicle-types *Transportation Letters - International Journal of Transportation Research*, 3 (2), 109-123, 2011.
23. Tom V Mathew, Snehamay Khasnabis, and Sabyasachee Mishra, Optimal resource allocation among transit agencies for fleet management, *Transportation Research Part A: Policy and Practice*, 44, 418-432, 2010.
24. Jeremy Blum, Anoop Sridhar, Tom V Mathew, Origin-Destination Matrix Generation from Boarding-Alighting and Household Survey Data for a Large Multi-modal Public Transit System, *Transportation Research Record: Journal of the Transportation Research Board*, 2183, 1-8, 2010.
25. Tom V Mathew and Padmakumar Radhakrishnan, Calibration of Microsimulation Models for Non-lane-Based Heterogeneous Traffic at Signalized Intersections, *Journal of Urban Planning and Development, ASCE*, 136, 59 (2010).
26. Sanghpriya S Kamble and Tom V Mathew, Real World Driving Cycle for 2-Wheelers and its Importance in Emission Estimation. *Indian Journal of Transport Management (IJTM)*. Vol.34, 239-247, 2010.
27. Tom V. Mathew and K.V.R. Ravishankar, Review of Car-Following Models and Following Behaviour in Heterogeneous Traffic Conditions, *Highway Research Journal, IRC*, 3(2), 2010.
28. Sushant Sharma, Satish Ukkusuri and Tom V. Mathew, Pareto Optimal Multiobjective Optimization for Robust Transportation Network Design Problem, *Transportation Research Record: Journal of the Transportation Research Board*, Volume 2090, pp 95-104, 2009.
29. Tom V. Mathew and Sushant Sharma, Capacity Expansion Problem for Large Urban Transportation Networks, *Journal of Transportation Engineering ASCE*, 135 (7), pp. 406-415, 2009.
30. H K Sanghpriya, Tom.V. Mathew, and G.K.Sharma, Development of Real World Driving Cycle for Heterogeneous Traffic in India, *Transportation Research Part-D: Transport and Environment*, 14, pp. 132-140, 2009.
31. P. J. Gundaliya, Tom V. Mathew, and S. L. Dhingra. 'Heterogeneous traffic flow modeling for an arterial using grid based approach,' *Journal of Advanced Transportation*, 42 (4), 467-491, 2008.
32. Satish V. Ukkusuri, Tom V. Mathew, and S. Travis Waller, 'Robust Network Design Problem under Demand Uncertainty using an Evolutionary Algorithm', *Computer-Aided Civil and Infrastructure Engineering*, 22, 6-18, 2007.
33. Bindhu Muralidhar, Tom V. Mathew, and S. L. Dhingra. 'A prototype time-space diary design and administration for a developing country,' *Journal of Transportation Engineering ASCE*, 132(6), 489-498, 2006.
34. P. J. Gundaliya, Tom V. Mathew, and S. L. Dhingra. 'Methodology to find optimum cell size for grid based cellular automata traffic flow model', *Journal of Transport Europei*, 29(10), 71-79, 2005.
35. Jitendra Agarawal and Tom V Mathew, 'Parallel GA for Transit Route Network Design', *Journal of Computing in Civil Engineering, ASCE*, 18(3), pp. 248-256, 2004.

36. Tom V Mathew and S. Mohan, 'Simultaneous Route and Frequency Coded GA Model for Transit Route Network Design,' Journal of Transportation Engineering, ASCE. 129(2), 186-195, 2003.
37. S. B. Pattnaik, S Mohan and Tom V. Mathew, Urban bus transit route network design using genetic algorithm, Journal of Transportation Engineering, ASCE, 124(4), 1998.

5.3 Papers in international conference proceedings

1. P Shah, V. Varghese, A. Jana, T. Mathew, Analysing the ride sharing behaviour in ICT based cab services: A case of Mumbai, India 15th World Conference on Transport Research (WCTR), Mumbai, India, May 26-30, 2019.
2. A. Sachan, T Mathew Integrated multimodal transit route network design with feeder systems 15th World Conference on Transport Research (WCTR), Mumbai, India, May 26-30, 2019.
3. A Patel, J. Venkateswaran, T. Mathew, Weighted center of mass based optimal control scheme for pre-timed signalized junctions 15th World Conference on Transport Research (WCTR), Mumbai, India, May 26-30, 2019.
4. R K Padinjarapat, T. V Mathew Estimating dynamic passenger car units for two lane roads using density as equivalence criteria 15th World Conference on Transport Research (WCTR), Mumbai, India, May 26-30, 2019.
5. Anna Charly, Tom V Mathew., Evaluation of Driving Performance in Relation to Crashes on an Expressway Using Naturalistic Driving Data., Transportation Research Board 97th Annual Meeting., 18-06666., 2018.
6. Remya K Padinjarapat, Tom V Mathew., Saturation Flow Model for Non-lane Based Urban Mixed Traffic., Transportation Research Board 96th Annual Meeting., 17-03917., 2017.
7. Anna Charly, Tom V Mathew., Estimation of modified time to collision as surrogate for mid-block crashes under mixed traffic conditions., Transportation Research Board 96th Annual Meeting., 17-04012., 2017.
8. Krishna Murthy Gurumurthy, Caleb Ronald Munigety, Tom V Mathew, Gowri Asaithambi., An Integrated Pedestrian Crossing Behavioral Model Using Spring-Mass-Damper Dynamics., Transportation Research Board 96th Annual Meeting., 17-04270., 2017.
9. Nidhi Goel, Nagendra R. Velaga, P. Vedagiri, and Tom V. Mathew., Optimal routing algorithm for large scale multi - modal transit networks., World Conference on Transport Research - WCTR 2016, Proceedia, 2017, Shanghai, China.
10. Sreekumar, M., Malgonde, A., and Mathew, T. Applicability of Continuum Models with Bi-regime Flux Function for Dynamic Travel Time Predictions, Transportation Research Procedia 17, pp. 693-702, 2016
11. Munigety, C., Gupta, P., Gurumurthy, K. M., Peeta, S., and Mathew, T. V. Vehicle-type Dependent Car following Model Using Spring-mass-damper Dynamics for Heterogeneous Traffic, 95th Annual meeting of Transportation Research Group (TRB), Washington, DC., January 10-14, 2016.
12. Babu, F. A. M., Vortisch, P., and Mathew, T. V. Modelling of motorcycle movements in mixed traffic conditions, 94th Annual meeting of Transportation Research Group (TRB), Washington, DC., January , 2015.
13. Sadguna Nuli and Tom V. Mathew Online coordination of signals for heterogeneous traffic using stop line detection Procedia Social and Behavioral sciences, Volume 104, 2 December 2013, Pages 765774, 2nd Conference of Transportation Research Group of India (2nd CTRG)
14. Sadguna Nuli and Tom V. Mathew Real time synchronization of signals for heterogeneous traffic 13th World Conference on Transport Research (WCTR), July 15-18, 2013 Rio de Janeiro, Brazil
15. Sadguna Nuli, Tom V. Mathew, and Tanmay Shah Adaptive signal coordination for heterogeneous traffic using downstream detection 93rd Annual meeting of Transportation Research Group (TRB), January 12-16, 2014 Washington, DC

16. Munigety, C., Vivek V., and Mathew, T. Semi-automated tool for extraction of microlevel traffic data from videographic survey. In: Proceedings of the 93rd Annual Meeting of Transportation Research Board, Washington D.C., January 2014.
17. Munigety, C., Sruthi, M., Mathew, T., and Krishna Rao, K.V. Analysis and Modelling of Tactical Decisions of Vehicular Lateral Movement in Mixed Traffic Environment. In: Proceedings of the 93rd Annual Meeting of Transportation Research Board, Washington D.C., January 2014.
18. Mathew, T., Munigety, C., Ashish, C., Abhijeet O., 2014. A space-discretization based simulation approach for non-lane based conditions. In: Proceedings of the 93rd Annual Meeting of Transportation Research Board, Washington D.C., January 2014.
19. Soumya Nair, Pulakesh Upadhyay, Tom V. Mathew, A Dynamic Offset Model based on Stop Line Detector Information, *Procedia - Social and Behavioral Sciences*, Volume 104, 2 December 2013, Pages 487-496, ISSN 1877-0428. Web
20. Pruthvi Manjunatha, Peter Vortisch and Tom V. Mathew, Methodology for Calibration of VISSIM in Mixed Traffic, 92nd Annual Meeting of Transportation Research Board, Washington D.C., 13-17 January 2013.
21. Mishra, S., Sharma, S., Mathew, T. V., and Khasnabis, S. Multiobjective Optimization Model for Transit Fleet Resource Allocation, 92nd Annual Meeting of Transportation Research Board, Washington D.C., 13-17 January 2013.
22. Mishra, S., Sharma, S., Khasnabis, S., and Mathew, T. V. Preserving an Aging Transit Fleet: Optimal Resource Allocation Perspective Based on Service Life and Constrained Budget 92nd Annual Meeting of Transportation Research Board, Washington D.C., 13-17 January 2013.
23. Caleb Ronald Munigety, Sruthi Mantri, Tom V. Mathew and Krishna Rao, Effect of Surrounding Traffic Characteristics on Lateral Movement Behavior in Heterogeneous Traffic Conditions, 92nd Annual Meeting of Transportation Research Board, Washington D.C., 13-17 January 2013.
24. Tom V Mathew, Design and Evaluation of an Adaptive Traffic Control System for Heterogeneous Flow Conditions, 2012 Indo-American Frontiers of Engineering, Arlington, VA, USA, March 1-3, 2012.
25. Omair Mohammed Abdullah, Caleb Ronald M, Tom V Mathew, and Anirudha Sahoo. A Strip-based Simulation Model for Mixed Traffic Conditions, 91st Annual Meeting of Transportation Research Board, Washington D.C., 22-26 January 2012.
26. Megraj Nalge, Revathy Nair, Chandan Kancharla, Tom V. Mathew, and Narayan Rangaraj. Real-Time Adaptive Control Policy for Intersection with Downstream Detection, 18th ITS World Congress, Orlando, USA, Oct 16-20, 2011.
27. K V R Ravishankar and Tom V. Mathew, Simulation of Mixed Traffic Using Embedded Neural Network Based Vehicle Following Models 17th ITS World Congress, Busan, S Korea, 2010.
28. Ravikumar P and Tom V. Mathew, Adaptive Traffic Control System for Developing Countries, 17th ITS World Congress, Busan, S Korea, 2010.
29. Sanghpriya H.K and Tom Mathew, Real world driving cycle for 2-wheelers and its importance in developing emission factors, 3rd International Congress of Environmental Research (ICER-10), 16-18 September 2010, Mauritius.
30. Jeremy Blum, Anoop Sridhar, Tom V Mathew, Origin-Destination Matrix Generation from Boarding-Alighting and Household Survey Data for a Large Multimodal Public Transit System 89th Annual Meeting of Transportation Research Board, Washington D.C., 10-14 January 2010.
31. Sushant Sharma, Satish Ukkusuri and Tom V. Mathew, Pareto Optimal Multiobjective Optimization for Robust Transportation Network Design Problem, 88th Annual Meeting of Transportation Research Board, Washington D.C., 11-15 January 2009.

32. Tom Mathew, Sushant Sharma and Jay Turner, Sustainable Urban Transport: Assessing Air Quality Impacts of ansporation Network Improvement Projects, 2nd International Symposium of Energy and Environment, McDonnell International Scholars Academy, Island Shangri-La Pacific Place, Supreme Court Road, Central, Hong Kong, December 8 - 10, 2008.
33. Padmakumar Radhakrishnan and Tom V. Mathew, Simulation modeling of heterogeneous traffic at an urban signalized intersection, 10th International Conference on Application of Advanced Technologies in Transportation (AATT-08), 27-31 May, Athens, 2008.
34. Sushant Sharma and Tom V Mathew, Modified Link Cost Function for Sustainable Transportation Network, 11th World Conference on Transport Research WCTR conference, UC Berkeley, USA, Jun 24-28, 2007.
35. P.J. Gundaliya, Tom V Mathew, S.L. Dhingra, Heterogeneous traffic representation for micro simulation, 11th World Conference on Transport Research WCTR conference, UC Berkeley, USA, Jun 24-28, 2007.
36. Sushant Sharma and Tom.V. Mathew, Transportation Network Design considering emissions as Bilevel Optimization Problem, 86th Annual Meeting of Transportation Research Board, Washington D.C., 20-24 January 2007.
37. Tom V. Mathew, Pradip Gundaliya, and S. L. Dhingra, Heterogeneous traffic flow modeling and simulation using cellular automata, 9th ASCE International conference on Applications of advanced technology in transportation (AATT06), Chicago, USA, August 14-16, 2006.
38. Tom V. Mathew and Sushant Sharma, Continous Network design with emission pricing as a bi-level optimization problem, 9th ASCE International conference on Applications of advanced technology in transportation (AATT06), Chicago, USA, August 14-16, 2006.
39. Snehamay Khasnabis and Tom V. Mathew, A single-stage genetic algorithm model for transit fleet resource allocation, Joint International Conference on Computing and Decision Making in Civil and Building Engineering, Montreal, Canada, June 14-16, 2006.
40. Saurabh Gupta and Tom V. Mathew, Validation of link travel time uisng GPS data: A case study of Western Express Highway Mumbai, Map Asia 2005, Jakarta, Indonesia, August 22-25, 2005.
41. Stuart J Clement, Michael AP Taylor, KV Krishna Rao, Tom V Mathew, and Pradip J Gundaliya, From chaotic road traffic to cooperative opportunistic percolation using cellular automata, Transporting the Future: Transport in a changing environment, 28th Australasian Transport Research Forum, Department of Planning NSW, Sydney, Australia, September 28-30, 2005.
42. Pradip Gundaliya, Tom V. Mathew, and S. L. Dhingra, Simulating single and two lane heterogeneous traffic using cellular automata, 5th International conference on computers in urban planning and urban management (CUPUM), June 29 -01 July, 2005, London, UK.
43. Bindhu Muralidhar, S. L. Dhingra, and Tom V. Mathew, Development of a mixed logit model to tour mode choice for an urban region, 5th International conference on computers in urban planning and urban management (CUPUM), June 29 -01 July, 2005, London, UK.
44. Pradip J. Gundaliya, Tom V. Mathew and S. L. Dhingra, Heterogenous traffic flow modelling using cellular automata, 10th World Conference on Transport Research (WCTR), July 4-8, 2004, Istanbul, Turkey.
45. Bindhu Muralidhar, S. L. Dhingra, and Tom V. Mathew, Activity travel pattern of the residents of the city in a developing country, 10th World Conference on Transport Research (WCTR), July 4-8, 2004, Istanbul, Turkey.
46. Tom V. Mathew and M Nashikkar, Combined traffic assignment and signal design, 10th World Conference on Transport Research (WCTR), July 4-8, 2004, Istanbul, Turkey.
47. S Gupta and Tom V. Mathew, Financial evaluation of road projects under BOT scheme in developing countries, 83rd Annual Meeting of Transportation Research Board, Washington DC, January 11-15, 2004.

48. Satish VSK Ukkusuri Tom V. Mathew and Travis Waller, Robust Optimization with Traffic Assignment under Demand Uncertainty, Institute of Operations Research and Management Sciences (INFORMS) Annual Meeting, Atlanta, GA, USA, October 19-22, 2003.

5.4 Papers in national conference proceedings

1. Munigety, C., Vivek V., and Mathew, T. Semi-automated tool for extraction of microlevel traffic data from videographic survey. In: Proceedings of Colloquium on Transportation Systems Engineering and Management, NIT Calicut, May 2014.
2. Sadguna Nuli and Tom V. Mathew Optimal control of urban corridor using reinforcement learning 10th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries, Organized by TSE, IIT Bombay, December 14, 2012
3. Nuli Sadguna and Tom V Mathew, Reinforcement learning for real time urban traffic signal control, In the proceedings of the International Simulation Conference of India, Bombay, Feb 2-4, 2012.
4. Ashutosh Bajpai and Tom V Mathew, Development and Evaluation of an Interface to Integrate Different Traffic Simulation Model, In the proceedings of the International Simulation Conference of India, Bombay, Feb 2-4, 2012.
5. Caleb Ronald M, Tom V Mathew, and K V Krishna Rao. Development of a space-oriented microscopic simulation model for First Conference of Transportation Research Group of India (CTRG) Bangalore, India, December 7-10, 2011.
6. Nuli Sadguna, Tom V Mathew RealTimeOptimalSignalControlUsingStopLineDetection First Conference of Transportation Research Group of India (CTRG) Bangalore, India, December 7-10, 2011.
7. AshutoshBajpai, Tom V Mathew DevelopmentOfAnInterfaceBetweenSignalControllerAndTraffic Simulator First Conference of Transportation Research Group of India (CTRG) Bangalore, India, December 7-10, 2011.
8. Ayyappa Rao Janga, P Vedagiri and Tom V Mathew, Public transit trip planner based on reliability and route Choice concepts Proceedings of International Conference on Advances in Materials and Techniques for Infrastructure Development (AMTID 2011) NIT Calicut, India, 2830 September 2011.
9. Tom V. Mathew, ITS and Its Applications in Traffic Control and Management, Sustainable Urban and Transportation Planning Issues and Management Strategies (SUTRIMS 11), NIT Surat, July 08-10, 2010.
10. B Anish Kini and Tom V Mathew, A Public Transit Trip Planner incorporated with Route Choice Modeling and Reliability, Conference on Infrastructure, Sustainable Transportation and Urban Planning - CiSTUP 2010, IISc Bangalore, 18-20 October, 2010.
11. KVR Ravi Shankar and Tom V. Mathew, A critical examination of vehicle type dependant following behavior at microscopic and macroscopic level, Conference on Infrastructure, Sustainable Transportation and Urban Planning - CiSTUP 2010, IISc Bangalore, 18-20 October, 2010.
12. Tom V. Mathew, Overview of Transit Route Network Design and Trip Planning, First Indo-US Symposium on Advances in mass transit and travel behaviour research (MTTBR-08), IIT Guwahati, India, February 12-15, 2008.
13. Bindhu Muralidhar, P.J. Gundaliya, Tom V. Mathew and S.L. Dhingra, Data Structure for an Object Oriented Activity Scheduling Simulation Model, First Indo-US Symposium on Advances in mass transit and travel behaviour research (MTTBR-08), IIT Guwahati, India, February 12-15, 2008.
14. Guru Charandas Nunna and Tom V. Mathew, Micro-Simulation of Heterogeneous Single Lane Traffic in VISSIM for Computing Link Travel Time, First Indo-US Symposium on Advances in mass transit and travel behaviour research (MTTBR-08), IIT Guwahati, India, February 12-15, 2008.

15. Valekar Priti and Tom V Mathew, Public Transit Fleet Management for Greater Mumbai, First Indo-US Symposium on Advances in mass transit and travel behaviour research (MTTBR-08), IIT Guwahati, India, February 12-15, 2008.
16. Tom V Mathew, Identification of Critical Transportation Network for Disaster Management, Roundtable Conference on Researching Disasters: Prospects and Dilemmas, JTCDM, TISS, Mumbai, February 4-5, 2008.
17. M. Mahadev and Tom V. Mathew, Forecasting Access/Egress Walk Trips to Transit For Grade Separated Pedestrian Facilities like Skywalks, 12th International Conference of the International Association for Travel Behaviour Research (IATBR), Jaipur, India, December 13-18, 2009.
18. Sushant Sharma and Tom. V. Mathew, Transportation network design problem, National conference on Civil Engineering Systems, Osmania University, Hyderabad, 1-3, 2006.
19. Salini Sasikumar and Tom. V. Mathew, Homogenous Traffic flow Modelling Using Cellular Automata for a Single Lane Arterial, National conference on Civil Engineering Systems, Osmania University, Hyderabad, 1-3, 2006.
20. Saurabh Gupta and Tom V. Mathew, GIS-GPS integration for information and surveillance of urban expressways in Indian context, Map India, 9th Annual international conference and exhibition on Geographic information science technology, and applications, New Delhi, January 30-February 1, 2006.
21. Tom V. Mathew and Saurabh Gupta, Micro-simulation of heterogeneous single lane traffic in VISSIM for computing link travel time, 2nd Indian international conference on artificial intelligence (IICAI-05), National Insurance Academy, Pune, December 20-22, 2005.
22. Bindu M., Dhingra S.L. and Tom V.M., A New Activity Diary Format Design in the Context of Developing Countries, Proceedings of the international conference on Transportation systems planning and operation, IIT Madras, February 18-22, 2004.
23. S. L. Dhingra, K. V. Krishna Rao, and Tom V. Mathew, Environmental Impact assessment for sustainable transport, National seminar on Strategies in traffic engineering and management (STEM), MSR Institute of Technology, Bangalore, 2004.
24. Pradip J. Gundaliya, Tom V. Mathew, and S. L. Dhingra, Cellular automata: an approach for traffic flow modeling, START, Civil Engineering Department, IIT Kharagpur, 2005.
25. Tom V. Mathew, Virendra Sethi, and Harshit Agrawal, Estimating vehicular emission reduction due to network level traffic management, Environment friendly transportation, Global Eco Meet, Trivandrum, February 19-28, 2005.
26. P. K. Sikdar and Tom V. Mathew, Strategic Evaluation of ITS Deployments 7th Asia-Pacific ITS conference and exhibition, Ashoka, New Delhi, August 9-11, 2005.
27. Tom V. Mathew and Saurabh Gupta, Travel Time Prediction Algorithm for Variable Message Signs in Heterogeneous Traffic, 7th Asia-Pacific ITS conference and exhibition, Ashoka, New Delhi, August 9-11, 2005.
28. Gundaliya P.J., Dhingra S.L. and Tom V.M., Application of Cellular Automation in Traffic Flow Modeling, Proceedings of the International Conference on Transportation Systems Planning and Operation, Chennai, 2004.
29. Bindu M., Dhingra S.L. and Tom V.M., A New Activity Diary Format Design in the Context of Developing Countries, Proceedings of the international conference on Transportation systems planning and operation, IIT Madras, February 18-22, 2004.
30. Tom V. Mathew, Combined traffic assignment and signal control, Proceedings of the international conference on Transportation systems planning and operation (TRANSP0), Chennai, February 18-20, pp 631-640, 2004.
31. Pradip J. Gundaliya, S. L. Dhingra and Tom V. Mathew, Proceedings of the international conference on Transportation systems planning and operation (TRANSP0), Chennai, February 18-20, 2004.

32. Bindhu Muralidhar, S. L. Dhingra and Tom V. Mathew, A new activity diary format design in the context of developing countries, Proceedings of the international conference on Transportation systems planning and operation (TRANSPPO), Chennai, February 18-20, 2004.
33. S. L. Dhingra, K V Krishna Rao and Tom V. Mathew, Environmental impact assessment for sustainable transport, Proceedings of national seminar on Strategies in traffic engineering and management, STEM04, Bangalore, February 16-17, 2004.
34. S. B. Pattnaik and Tom V. Mathew, Energy Efficient and Environment Conscious Intelligent Signal Design Package for Large Sized Indian Cities Proc. of the National Seminar on Emerging Trends in Highway Engineering, Bangalore 1995.
35. S. B. Pattnaik and Tom V. Mathew, 'Appraisal of design approaches for energy efficient urban public transit systems,' Proceedings of the II International Conference on Road and Road Transport, ICORT' New Age Ltd., Delhi, 1995.

6 Post graduate research

6.1 Ph.D thesis supervision

1. Pradip J Gundaliya, Heterogeneous traffic flow modeling for an arterial road using cellular automata, 2002-06.
2. Bindu Muralidhar, A day activity scheduling procedure for travel demand analysis, 2002-06.
3. Sushant Sharma, Transportation network design considering environmental parameters and demand uncertainty, (2004-09).
4. R Padmakumar, Modeling urban signalized intersections under heterogeneous traffic conditions, (2004-10).
5. Sangh Priya, Real world driving cycle for constructing emission factor and inventory model to estimate vehicular emission for an urban region, (2005-12).
6. KVR Ravi Shankar, Modeling of vehicle-type dependent behavior in mixed traffic conditions , (2006-11).
7. Sadguna Nulli, Adaptive Traffic Signal Control Algorithms for Isolated Intersections and Corridors, (2009-16).
8. Caleb Ronald, Modeling Behavioral Interactions of Drivers' During Longitudinal and Lateral Movements In Non-Lane Based Mixed Traffic Conditions, (2010-15).
9. P Ravikumar, Adaptive Signal Control System Components for Non-lane based Mixed Traffic Flow Conditions, (2008-17)
10. Sreekumar Mohan, Multi-Class Continuum Traffic Flow Modelling Using Traversable Distance for Dynamic Travel Time Predictions, (2012-18)
11. Dillip Rout, Transit Route Network Design, (2013-to date)
12. Alok Patel, Real-time adaptive signal design, (2013-to date)
13. Remya K P, Saturation flow modeling, (2015-to date)
14. Anna Charley, Traffic safety, (2015-to date)
15. Bijul Raveendran, Adaptive Traffic Signal Control (2017-todate)

6.2 M.Tech dissertation

1. Rajesh Kumar Dash, Freeway heterogeneous traffic flow modeling and simulation, 2002-03.
2. Darcy Prakash, Equilibrium network signal design as a bi-level programming problem, 2002-03.
3. Mukund Nashikkar, Traffic assignment algorithm for urban road network considering link interactions, 2003-04.
4. Maj. Vivek Mathur, Mechanistic methods in flexible pavements design, 2003-04.
5. Maj. Suresh Adhikari, Pavement management system in GIS environment, 2003-04.
6. Saurabh Gupta, Traffic monitoring and control for Intelligent Transportation Systems, 2004-05.
7. Salini S, Homogeneous traffic flow modeling for an urban arterial using cellular automata, 2005-06.
8. M V N Indira, Urban corridor analysis, 2005-06.
9. Venugopal, Transit route network design using genetic algorithm for Greater Mumbai, 2005-06.
10. Suraj Shinte, Evaluation of an area traffic control system, 2006-07.
11. Anurag Khushava, Effects of route choice models in network travel time reliabilities, 2006-07.
12. Kajal Dubey, Conceptual architecture and progression model for an Area Traffic Control System, 2007-08.
13. Nanda Kumar Reddy, Approximation Schemes and sampling methods for robust network design problem under uncertain demand, 2007-08.
14. Revade Ravi Sukhadev, Evaluation of Area Traffic Control System and saturation flow model for heterogeneous traffic, 2007-08.
15. Valekar Priti, Public Transit Fleet Management for Greater Mumbai, 2007-08.
16. Nunna Guru Charandas, Travel time prediction from single loop detection, 2007-08.
17. Ishtiyag Gull, Optimal transit route network design (with Prof. S L Dhingra), 2007-08.
18. M. Mahadev, Forecasting travel demand for pedestrian facilities, 2008-09.
19. Avinash Shabade, Urban Intersection Modeling For Area Traffic Control in Heterogeneous Traffic, 2007-09.
20. Siva Krishna G, Activity based Travel Demand Modeling, 2007-09.
21. Pranjal Pramod Patil, Vulnerability analysis of transportation network infrastructure, 2007-09.
22. Anish Kini, Transit trip planner, 2008-10.
23. Revathy Nair, Development of system architecture for Area Traffic Control Systems for heterogeneous traffic, 2008-10.
24. Pankaj Yadhav, Modeling traffic operations at toll plazas, 2008-10.
25. Rishi Chandra, Algorithms for transit trip planner (with Prof. A Ranade, CSE, 2008-10.
26. Meghraj, Algorithms for traffic control methods with down-stream detection system (with Prof. N Rangaraj, IE&OR, 2008-10.
27. Keerthi Chandan K V, Real-time adaptive control policy for intersection with down-stream detection, 2010-11.
28. B D N V Prasad Manapalli, Analysis of traffic data from loop detectors, 2010-11.
29. Omair Mohammed Abdullah, Simulation based modeling of Indian road traffic (with Prof. A Sahoo), 2009-10.

30. Anna Charly, Coordination of real-time adaptive traffic signal control for intersections with downstream detection, 2011-12.
31. Pruthvi M, Evaluation of adaptive traffic control system using calibrated traffic simulator VISSIM, 2011-12.
32. Soumya Ramachandran Nair, Estimation of Dynamic Offset for an Adaptive Coordinated Traffic Signal Control System, 2012-2013.
33. Pratik Patra, Real Time Adaptive Traffic Signal Optimization, 2012-2013.
34. Abhijeet Ostawal, Operational Model for Lateral Movement in Mixed Traffic Conditions, 2013-2014.
35. Ramesh Chandra Majhi, Saturation Flow Modelling Using Dynamic Passenger Car Unit Under Mixed Traffic Condition, 2013-2014.
36. Freddy Antony M.B, Modelling of Motorcycle Movement in Mixed Traffic Condition, 2013-2014.
37. Rohan R. Shelkar, Saturation Flow Modelling of Signalized Intersection in Mixed Traffic, 2014-2015.
38. Vishal Konbattulwar, Operational Lateral Movement Model for Motorcycle in Mixed Traffic Conditions Using Social Force, 2014-2015.
39. Kritika Saini, Development of U-Turn Adjustment Factor at Signalized Intersection and Simulation of U-Turn Movement in VISSIM, 2017-2018.
40. Anu Sachan, Integrated Multi-modal Transit Route Network Design with Feeder Systems, 2017-2018.

6.3 B.Tech project supervision

1. Jitendra Agarawal, Transit route network design using parallel GA, 2001-02.
2. Saurabh Gupta, Economic and Financial evaluation of transport infrastructure projects, 2002-03.
3. Sekhar Banka, Reduction in air pollution due to proposed mass transit system, 2003-04.
4. Ratnesh Bansal, Flexible airfield pavement design, 2003-04.
5. Harshit Agrawal, Vehicular emission modeling, 2004-05.
6. Gautam Ganesh, Application of GPS in transportation, 2004-05.
7. Shomik Sen, A study of car following models in mixed traffic, 2005-06.
8. Pawan Kothari, Analysis and reconstruction of vehicular accidents, 2005-06.
9. Kshitij Torka, Reduction in air pollution by capacity expansion in a transportation system, 2005-06.
10. Prakash Gupta, Economic and financial evaluation of BOT scheme for highway projects, 2005-06.
11. Jyotsana Pannala, Sampling techniques in robust network design, 2006-07.
12. Prerna Singhvi, Risk assessment of transport projects, 2006-07.
13. Anmol Arora, Evaluation of Automatic Merge Control Algorithms, (with Prof. K Ramamritham, CSE), 2007-08.
14. Rajat Toshniwal, Development of Transit Trip Planner, 2007-08.
15. Gurveen Bedi, Public transit trip planner, 2008-09.
16. Akhil Gupta, Evaluation of coordinated signals, 2008-09.

7 Sponsored projects undertaken

1. Setting up on electronics instructional class room, from MHRD, with G Venkatachalam and EP Rao, 2003-05.
2. Development of the Web based course Introduction to transportation engineering for National Program on Technical Education and Learning (NPTEL) of Ministry of Human Resources and Development (MHRD), Government of India, (Phase I), 2003-06.
3. Rural Roads Pavement Performance Study (RRPPS), Ministry of Rural Development, 2007-10.
4. Analysis and design of Large Scale Robust Transportation Network (CP-STIO), Department of Science and Technology, 2007-10.
5. Second generation area traffic control system, Department of Information Technology, Government of India. (with KV Krishna Rao, K. Ramamritham, N. Rengaraj and CDAC(T)), 2009-12.
6. Real-time transit route information and Trip planner, Department of Information Technology, Government of India. (with A. Ranade, KV Krishna Rao P. Vedagiri, and CDAC(T)), 2009-12.
7. Real time traffic counting and monitoring station, Department of Information Technology, Government of India. (with KV Krishna Rao, H. Pillai, S Chaudhuri, G. Patil and CDAC(T)), 2009-12.
8. Development of the Web based course Traffic Engineering and Management for National Program on Technical Education and Learning (NPTEL) of Ministry of Human Resources and Development (MHRD), Government of India, (Phase II), 2010-12.
9. Development of the Virtual Laboratory on Traffic Engineering for the Ministry of Human Resources and Development (MHRD), Government of India, (Phase II),
10. Joint Center on ITS, Indo-US Science & Technology Forum, New Delhi.
11. Road Safety Audit of four laning of Khed-Sinnar section of NH 50, NHAI (co-PI).

8 Consultancy work done

1. Technical Evaluation of a Traffic Signal Control System., INSPIRA., 2018.
2. Traffic study for H-Mill parking, Aakruthi, 2011.
3. Impact of Multi-story parking, MVA-Systra, 2011.
4. Parking demand assessment of Multi-level car park for proposed Vikhroli corporate park, HCC, 2010.
5. Traffic simulation at Mumbai International Airport, 2010.
6. Traffic Management Plan during construction phase of Mumbai International Airport Project, Larson and Tubro Limited, 2009-10
7. Traffic studies for the 247 IT Park, Hindustan Construction Corporation, 2009.
8. Traffic analysis of Kapurbawadi Junction, Thane, SN Bhobe Associates and MSRDC, 2009.
9. Planning for pedestrian sky-walk for Navi Mumbai, Spectrum and CIDCO, 2008.
10. Traffic circulation plan, Mumbai International Airport Limited, 2007-08.
11. Evaluation of CosisCost: Area Traffic Control System at Jaipur, CDAC-Trivandrum, 2007.
12. Traffic and transportation study for the city of Bhopal, 2006.
13. Rigid pavement overlay design over jetty, Naval Dock Yard, Karanja, 2006.

14. Geometric and pavement design verification of 118 km of NH-3, IRCON-SOMA, 2005.
15. Ministry of Rural Development, Prime Ministers Gramin Sadak Yojana
16. Technical expert for the GOA airport traffic circulation plan, Airport Authority of India, 2003-04. (PMGSY), 2003-07.
17. Technical Presentation for Noida International Hub Airport Bidding at Noida, UP, for Gilcon, Gammon India Ltd., in Sep-Oct, 2002.
18. Bitumen Testing, Velecha Constructions, 2002.
19. Road Aggregate Testing, BPCL, 2002.
20. Evaluation of Bituminous Products, BITUCORP LTD, 2002.
21. Study of Traffic Movement and Signage in Mumbai Domestic and International Airport, Airports Authority of India, 2002.

9 Short term courses organized

1. Short Term Courses Road Safety Audit Workshop, at IIT Bombay.
2. Short Term Courses Road safety and accident control, RIT Kottayam
3. QIP Short Term Course on Innovations in Traffic Flow Modeling, Indian Institute of Technology Bombay, 05-09 July 2010.(With Prof. P Vedagiri)
4. Organized a one day workshop on Micro-Simulation using VISSIM, jointly with PTV, Germany, May 2, 2008.
5. Organized 3 day CEP short term course on Travel demand modeling, 21-25, November, 2005, (with Prof. K V Krishna Rao).
6. Organized second 5 day QIP short term course on Recent developments in urban transportation systems planning, 21-25, November, 2005, (with Prof. K V Krishna Rao).
7. Organized a five day QIP short term course on Recent developments in urban transportation systems planning, 21-25, July, 2003, (with Prof. K V Krishna Rao).

10 Workshops/Conferences

1. Organizing Vice-Chairman, International conference on Transportation Planning & Implementation Methodologies for Developing Countries (TPMDC) December 2012
2. Organizing Vice-Chairman, International conference on Transportation Planning & Implementation Methodologies for Developing Countries (TPMDC) December 2010
3. Organizing secretary, IIT Bombay golden jubilee international conference on Transportation Planning & Implementation Methodologies for Developing Countries (TPMDC) December 2008
4. One day national workshop on Intelligent Transportation Systems on behalf of CDAC-Trivandrum and Department of Information Technology, April 2007.
5. Member of organizing committee for 7th International Workshop on Transportation Planning & Implementation Methodologies for Developing Countries (TPMDC) December 2006, organized by Transportation Systems Engineering of Civil Engineering Department of IIT Bombay.

6. Member of organizing committee for 6th International Workshop on Transportation Planning & Implementation Methodologies for Developing Countries (TPMDC) December 2004, organized by Transportation Systems Engineering of Civil Engineering Department of IIT Bombay.
7. Member of organizing committee for 5th International Workshop on Transportation Planning & Implementation Methodologies for Developing Countries (TPMDC) December 2002, organized by Transportation Systems Engineering of Civil Engineering Department of IIT Bombay.

11 Invited lectures

1. Lecture series on Transportation Systems Engineering to the Masters students of Rajiv Gandhi Institute of Technology, Kottayam, under visiting faculty scheme of the Government of Kerala, 2011.
2. Lecture series on Transportation Systems Engineering to the Masters students of College of Engineering, Trivandrum, under visiting faculty scheme of the Government of Kerala, 2010.
3. Lecture series on Transportation Systems Engineering to the Masters students of Rajiv Gandhi Institute of Technology, Kottayam, under visiting faculty scheme of the Government of Kerala, March 22-23, 2010.
4. Major Infrastructure projects initiatives in India: A case study of Mumbai, Workshop on the IITB-NTU joint masters program, Singapore, Oct 31, 2009.
5. Lecture on 'Public Transport System Planning', AICTE Short Term Training Program on Approaches and practices in urban transportation planning (APUTP-09) SVNIT, Surat, Jan 8, 2009.
6. Invited presentation on Transportation: Road transport, Railways, Aviation, Water ways, Cross-Disciplinary Areas and Impact on Nation, in the 2nd Symposium of University-Industry Council, IIT Bombay, May 09-10, 2008.
7. Presented a talk on the Heterogeneous Traffic Flow Modeling using cellular automata at Wayne State University at Detroit in July 6, 2006.
8. Presented a talk on the Heterogeneous Traffic Flow Modeling using cellular automata at Rensselaer Polytechnic Institute (RPI), Troy, NY in June 2006.
9. Instructor for the Refresher cum training course for BMC Engineers organized by Prof. KVK Rao and presented four lectures on bitumen and aggregate testing in Jan 2006.
10. Resource person on 'Genetic Algorithm' for the QIP short term course on 'Soft computing in Civil Engineering' organized by Prof. MC Deo, IIT Bombay, Jan 2006.
11. Instructor of the Road safety training program for highway engineers conducted for NHAI, Nashik, and presented four lectures on 'Work zone traffic management' in Dec 2005.
12. Delivered a lecture on 'Genetic Algorithms' at the QIP short term course on Soft computing at IIT Madras, 2004.
13. Presentation titled 'Public transportation' as part of the Traffic Management Training Program for the BMC Engineer under MUTP project, BMC training center, Sept 2004.
14. Presented a talk on 'Genetic Algorithms' as part of the ISTE Mumbai chapter at IIT Bombay on Mar 11, 2004.
15. Presented a talk on the Recent infrastructure projects in India at University of Texas, College Station, Jan 2004.
16. Presented a talk on the Recent infrastructure projects in Mumbai at University of Texas, Austin, Jan 2004.
17. Delivered a lecture on 'Genetic Algorithms' at the QIP short term course on Water Resources Engineering, May 2002.

18. Presented a seminar talk titled 'Genetic Algorithm for Transit Route Network Design', in the Department of Civil Engineering, Indian Institute of Technology Kharagpur, India, Mar 2000.
19. Lectures on Genetic Algorithm for the Work Shop conducted by the Industrial Mathematics Department of MSU Baroda, Jan 5-7, 2002.
20. Presentation titled 'Genetic Algorithm for multi-objective optimization problems' at Birla Institute of Technology, Pilani, India, Oct 2000.
21. Presentation titled 'Genetic Algorithm for multi-objective optimization problems' at University of Roorkee, India, Oct 2000.
22. Lecture titled 'Application of ANN and GA in Transportation; for the short term course at Indian Institute of Technology Madras, Dec 1995.

12 Membership in professional bodies

1. ASCE, USA, Member.
2. TRB, USA, Member.
3. Indian Society of Technical Education (ISTE) Life member.
4. Institute of Urban Transport (IUT) India, Life member.
5. ASCE Western India Chapter, Mumbai, Life member.
6. Indian Roads Congress, Delhi, Life Member.
7. Transport Research Group of India, Life Member.

13 Honorary Works

1. Member, Research Council, National Transportation Planning and Research Center, NATPAC, Trivandrum, Kerala (2013-)
2. Member, Scientific Committee, Urban Mobility India (UMI) Symposium, Delhi, 3-5 December 2011.
3. Member of the International Technical Committee(ITC), IEEE Intelligent Transportation Systems Conference, ITSC 2011, 2011, Washington DC, USA.
4. Member, Technical Scrutiny Committee for the Development of Multi-level Car Parking in Greater Mumbai, Municipal Corporation Of Greater Mumbai, 2009.
5. Member, Technical Scrutiny Committee for the Local Area Traffic Improvement Project in Greater Mumbai, Municipal Corporation Of Greater Mumbai, 2010.
6. Expert Member, AICTE Accreditation Committee for NIT Trichy, 2008.
7. Ph.D Thesis examiner: IIT Roorkee 2006, IIT Madras 2013.
8. M.S Thesis examiner NIT Surat 2007, IIT Madras 2007, IIT Madras 2008.
9. Reviewer for the ASCE Journal of Computing, ASCE Journal of Transportation Engineering, Journal of Heuristics, Physics Letters A.
10. Reviewer for the International conferences: AATT06/08, IICAI-05, TRB-2007/08/09/10, WCTR 2004/07/10.
11. Session chair for the 10th World Conference on Transport Research (WCTR), July 4-8, 2004, Istanbul, Turkey.
12. Reporter for the International workshop on disaster management, 'Reducing urban risk through international cooperation', BMC, Govt. of Maharashtra, December 4-6, 2003, Mumbai, India.

14 Academic and corporate activities in IIT Bombay

1. Up-gradation and maintenance of computing facilities of the department, includes the installation, and maintenance of the Departmental Mail, Web, File, and Computing servers, Installation and support of common software such as AutoCAD (ADT,LDT), Mat lab etc. (2002-till date)
2. Up-gradation of the computing facilities of Transportation Systems Engineering Laboratory including Installation and support of software such as VISSIM, VISUM, MX.
3. Involved in the development of newly started AI Lab and PG Lab.
4. Ph.D Thesis internal examiner of Ashish Verma (2004) and M Kumar (2005) of IIT Bombay, PK Bhuyan (2007-08).
5. Member of the departmental under graduate committee (DUGC), 2007-10.
6. Secretary and member of the departmental post graduate committee (DPGC) 2002-05.
7. Faculty in charge of the departmental computing laboratory (from 2003-05).
8. Member of the departmental computer committee (DCC) from September 2002.
9. Coordinator of CE396 Works Visit for III year B.Tech students. The students were exposed to fourteen civil engineering construction site/plants in a the period 2002-06 Spring Semesters.
10. Member of institute traffic and transportation, planning and monitoring committee (TTPMC).
11. Examiner for 2002 GATE, Institute Representative for GATE 2004 Ahmadabad, GATE 2005 Pune, GATE 2006 Pune.
12. Institute Representative for JEE 2001 screening Pune, JEE 2002 Main at Nagpur, JEE 2003 screening at Nagpur, JEE 2003 Main at Jaipur, JEE 2004 screening, JEE 2004 Main, JEE 2005 screening at Kota, JEE 2005 main at Jaipur, JEE 2006 main at Kota, JEE 2007 Kota, JEE 2008 Jaipur,
13. JEE Coding 2007, Tabulation JEE 2008, 2009, 2010, 2011.
14. JEE Chairman 2013, JEE Vice-Chairman 2012.
15. Professor-in-charge, Training and Placements, 2015-to date.