Satish V Ukkusuri

Curriculum Vitæ

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Education

- **Doctor of Philosophy (PhD)** August 2005
  The University of Texas at Austin
  Transportation Systems, Civil Engineering
  Coursework in Game Theory, Optimization, Network Models, and Algorithms
- **Master of Science (MS)** December 2002
  University of Illinois at Urbana Champaign
  Transportation Systems, Civil Engineering
- **Bachelor of Technology (BTech)** July 2001
  Indian Institute of Technology, Madras, India
  Major: Civil Engineering, Minor: Systems Engineering

Professional Experience, Appointments and Affiliations

- **Reilly Professor of Civil Engineering** April 2021-Present
  Lyles School of Civil Engineering
  Purdue University
- **Director** August 2023-Present
  Purdue Center for Transportation Cybersecurity and Resiliency, Discovery Park District
  Purdue University
- **Associate Director** June 2023-Present
  National Transportation Cybersecurity and Resiliency Center (TraCR), USDOT funded UTC Center
  Clemson University
- **Full Professor** July 2014-Present
  Lyles School of Civil Engineering
  Purdue University
- **Visiting Distinguished Professor** April 2015-December 2017
  School of Transportation Engineering
  Tongji University

- **Honorary Professor** July 2016-December 2019
  Department of Civil Engineering
  Tsinghua University

- **The Center for Education and Research in Information Assurance and Security (CERIAS) Faculty Affiliate** August 2022-Present

- **Institute for Sustainable Future Faculty Affiliate** August 2021-Present

- **Discovery Park Purdue Policy Research Institute Affiliate** March 2017-Present

- **Discovery Park Center for Environment (C4E) Affiliate** March 2013-2020

- **Building Sustainable Communities Cluster Hire Co-lead** June 2012-2020

- **Visiting Professor** (sabbatical) February-March 2016
  Department of Civil Engineering
  Hong Kong University of Science and Technology

- **Fulbright Scholar** (sabbatical) October 2015 - December 2016
  Uninorte, Colombia

- **Senior Visiting Fellow** September-October 2012
  School of Civil and Environmental Engineering
  University of New South Wales, Australia

- **Associate Professor** August 2009-July 2014
  Lyles School of Civil Engineering
  Purdue University

- **Assistant Professor** August 2005-August 2009
  Blitman Endowed Chair Professor
  Department of Civil and Environmental Engineering
  Department of Decision Sciences and Engineering Systems (by courtesy)
  Rensselaer Polytechnic Institute

Honors and Awards

- Bravo Award, Special Employee Recognition Award for creating new programs, 2024
- College of Engineering Faculty Excellence Award in Graduate Student Mentorship for "excellence in mentoring of graduate students", 2024
- CE Mary Ann Zimmerman Innovation Award (with my student Shagun Mittal) for "innovative work in using location-based data for smart mobility solutions in Africa", 2022
- Reilly Professor of Civil Engineering, April 2021-present
- American Society of Civil Engineering (ASCE) Fellow, 2021
- Best Paper Award at NeurIPS Cooperative AI workshop for the paper "On the Approximation of Cooperative Heterogeneous Multi-Agent Reinforcement Learning (MARL) using Mean Field Control (MFC)", 2021
- Invited to attend the 7th Arab-American Frontiers of Science, Engineering and Medicine by the US National Academies of Science (NAS) in Cairo, Egypt, 2019 based on contributions in community based disaster resilience
- Poster Competition, 2nd Prize, at NetMob International Workshop for poster on "Understanding Post Disaster Population Recovery Patterns", London, UK, July 10, 2019
- Distinguished Lecturer, Department of Civil, Environmental and Architectural Engineering, University of Texas at Austin, Spring 2019
- Arab-American Frontiers Fellowship by the US National Academies of Science (NAS) "given to increase and strengthen science and technology cooperation between researchers and institutions in the US and countries in the Arab league", 2018
- Invited to attend the 5th Arab-American Frontiers of Science, Engineering and Medicine by the US National Academies of Science (NAS) in Rabat, Morocco, 2017 based on contributions in smart cities
- University Faculty Scholar, In recognition of "outstanding faculty members who are on an accelerated path for academic distinction", 2017-2022
- Seed of Success ACORN Research Award, In recognition of world changing research and "accomplishments of investigators for their efforts in obtaining a $1 million dollar or more external sponsored award" given by Purdue University 2015, 2016, 2017, 2018
- Selected as a Honorary Professor at Tsinghua University based on significant academic achievements and leadership, 2016-2019
- Invited to attend the National Academies of Engineering (NAE) Japan Academy of Frontiers of Engineering Conference, 2016
- Fulbright Innovation and Technology Award, 2015-16
- IMPACT Faculty Fellow "selected to redesign courses that advances student centered teaching and learning environments", 2013

- Discovery Park Faculty Scholar, Based on "developing interdisciplinary research activities at the campus level", 2013-15
- Roy E. and Myrna G. Wansik Civil Engineering Research Award given to an outstanding researcher in School of Civil Engineering - 2012
- Advisor, Smart Cities Center, Monash University, 2019-present
- CUTC-ARTBA New Faculty Award for contributions to transportation research and education, 2011
- Emerging Scholars Grant, University Transportation Research Center, Region 2, 2007
- Collaborative Projects for Scientists and Technologists of Indian Origin (CP-STIO) Award, Department of Science and Technology, Govt. of India (only award in civil engineering in 2007), 2007-2010
- Howard A Blitman Endowed Professorship, 2005-2009
- Southwest Region University Transportation Center (SWUTC)Robert Herman Award for outstanding research and leadership, 2005
- NSF Scholarship to attend the Xth International conference in Stochastic Programming, Tucson, AZ, 2004.
- Graduate Travel Grant by College of Engineering, University of Illinois Urbana Champaign, 2002.

Awards to my Students:

- Yoder Award, Rajat Verma, 2023
- STV Transportation Award, Jiawei Xue, 2023
- Summer Internship, World Bank, Shagun Mittal, 2022 and 2023
- STV Transportation Award, Takahiro Yabe, 2020
- Summer Internship, World Bank, Takahiro Yabe, 2020
- Honorable mention as one of the three finalist papers for the Best student paper award at NecSys 2019, International Federation of Automatic Control, Hemant Gehlot, 2019
- Society of Risk Analysis Engineering and Infrastructure Systems group (EISG) student merit award, Takahiro Yabe, 2019
- Essam and Wendy Radwan Graduate Fellowship, Purdue University, Hemant Gehlot, 2019
- Society of Risk Analysis Annual Meeting Travel Award, Takahiro Yabe, 2019
- NetMob International Workshop, Best Poster Award, Takahiro Yabe, 2019
- American Control Conference (ACC) Student Travel Award, Hemant Gehlot, 2019
- ITE Best Presentation Award, Takahiro Yabe, 2019

- Purdue Systems Fellow, Takahiro Yabe, 2018-2021
- Finalist, Chorafas Award, Xinwu Qian, 2018
- First Prize, Health and Disease: Science, Technology, Culture and Policy Poster Session at Purdue University, Xinwu Qian, 2018
- College of Engineering Graduate student travel award to Wenbo Zhang, 2017
- International Association of Taxi Regulators (IATR) Hackaton Winners - Xinwu Qian (Prof. Ukkusuri mentored a team of his graduate students), 2017
- James S McDonnell Post Doctoral Fellowship in Complex Systems to Xianyuan Zhan, 2016 (declined)
- Swiss Science Fellowship to Wenbo Zhang, 2016
- Eldon Yoder Award for Best Graduate student to Sadri Arif Mohaimin, 2016
- Pai Tao Yeh Travel Fellowship to Xinwu Qian, 2016
- Excellence in Interdisciplinary Research from the Office of the Interdisciplinary Graduate Program to Sadri Arif Mohaimin, 2016
- CE Best Dissertation Award given to the best dissertation in Purdue Civil Engineering, Rodrigo Mesa Arango, 2015
- Microsoft Asia Internship, Xianyuan Zhan, 2015
- INFORMS Transportation Science and Logistics (TSL) Society Best Dissertation Award given to an outstanding dissertation in transportation and logistics from all over the world, Samiul Hasan, 2014
- Eldon Yoder Memorial Award for Best Graduate student to Rodrigo Mesa Arango, 2014
- Pai Tao Yeh Travel Fellowship to Feng Zhu, 2014
- Civil Engineering Outstanding Graduate Student to Abdul Aziz, 2014
- International Road Fellowship to Rodrigo Mesa Arango, 2013
- College of Engineering Best Graduate Student Research Award to Samiul Hasan, 2013
- Student Sustainability Research Project Award to Abdul Aziz, 2013
- Pai Tao Yeh Travel Fellowship to Xianyuan Zhan: 2013, 2014
- Graduate School Travel Grant to Abdul Aziz, 2013
- Best Poster Award, Shell Day at Discovery Park to Abdul Aziz, 2012
- Colombia Student Association Travel Grant to Rodrigo Mesa Arango, 2012
- INFORMS Transportation Science and Logistics (TSL) Society Best Dissertation Award given to an outstanding dissertation in transportation and logistics from all over the world, Gitakrishnan Ramadurai, 2009

- 2nd Paper Award at the 2008 ITS World Congress on"Next Generation Traveler Guidance Systems, Gitakrishnan Ramadurai, 2008
- MIT Clean Energy Prize, Semi-Finals, Gitakrishnan Ramadurai, 2009
- Founders Award to M.E. student, Courtney Sweeney, 2007.
- 9/11 Fellowship from NYMTC/UTRC to my PhD student, Gitakrishnan Ramadurai, 2007-2008.

Scientific Publications

- **Citations**: Google Scholar citations: 14349 (5986 in last 3 years); h-index: 62; Scopus citations: 9322; h-index: 52 (December 24, 2023)
- **Theses**

1. **PhD Dissertation:** *Accounting for Uncertainty, Robustness and Information Recourse in Transportation Networks*
   University of Texas at Austin, August 2005

2. **Master's Thesis:** *Linear Programs for the User Optimal Dynamic Traffic Assignment Problem*
   University of Illinois at Urbana Champaign, December 2002

3. **Undergraduate Thesis:** *Optimal Signal Settings using Genetic Algorithm*
   Indian Institute of Technology, Madras (Chennai), May 2001.

- **Books**

1. Ukkusuri, S.V. and Ozbay, K (Editors). Advances in Dynamic Traffic Guidance and Control. Vol. 2. Series on Complex Networks and Dynamic Systems. Springer Publications. 2015. 312 pages.
2. Ukkusuri, S.V. and Yang, C. (Editors). Transportation Analytics in the Era of Big Data. Vol. 4. Series on Complex Networks and Dynamic Systems. Springer Publications. 2019. 234 pages.

- **Key Project Reports**

1. Holguin-Veras, J., Ukkusuri, S.V., Ozbay, K., Cerreno, A. and Kornhauser, A. (2010). Integrative freight demand management in New York Metropolitan area. USDOT Report.
2. Lee, S., Ukkusuri, S.V., Clawson, R., Aldrich, D., Kelly, D., Siepel,J., Nelson, M. and Arif, S. Resilience Communities: Strengthening post-disaster recovery by understanding interdependent social and physical networks. Purdue Policy Research Institute Report and Policy Paper.
3. Ukkusuri, S. V., Gkritza, K., Qian, X., and Sadri, A. M. (2016). Best practices for maximizing driver attention to work zone warning signs (Joint Transportation Research Program Publication No. FHWA/IN/JTRP-2016/15). West Lafayette, IN: Purdue University. `http://dx.doi.org/10.5703/1288284316338`
4. Ukkusuri, S.V., Labi, S., Zhu, F., Le, T., and Sagir, F. (2017). Evaluating the impacts of time-of-day tolling on Indiana roadways (Joint Transportation Research Program Publication No. FHWA/IN/JTRP-2017/08). West Lafayette, IN: Purdue University. `https://doi.org/10.5703/1288284316508`

5. Ukkusuri, S.V., Sagir, F., Mahajan, N. and Bowman, B. (2019). Tactical guidance for Indiana transportation for the Connected and Autonomous vehicles future (Joint Transportation Research Program Publication No. FHWA/IN/JTRP-2017/08). West Lafayette, IN: Purdue University.
6. DJ Case Associates, Purdue University Center for Regional Development, Purdue University Forestry and Natural Resources, Ukkusuri, S.V. Indiana Hardwood Assessment. Report prepared for Indiana Department of Agriculture. March 2019.

(P)reprints available on request.

- **Peer Reviewed Book Chapters**

1. Ukkusuri, S. V., and Holguin-Veras, J. E. Assessing critical components in transportation systems: Economic Models and Complex Network Science Models. *Network Science, Non-linear Science and Infrastructure Systems*. Chapter 9. Pages 187-200. Editor: Professor Terry Friesz. 2006.
2. Ukkusuri, S. V. and Karoonsoontawong, A. and Waller, S. T. and Kockelman, K. Congestion Pricing Technologies: A comparative evaluation. *Transportation Research Trends*. Chapter 4. Pages 121-142. Nova Publications. 2007.
3. Ukkusuri, S. V., Du, L. and Kalyanaraman, S. Integrating Traffic Flow Features to Characterize the Interference in Vehicle Ad Hoc Networks. *Automotive Informatics and Communicative Systems: Principals in Vehicular Networks and Data Exchange* . Chapter 9. Pages 162-179. Editors: Huaqun Guo. Singapore. 2008.
4. Ukkusuri, S. V. and Friesz, T. L. Transportation Network Design: Problem Definition and Review. *A Dictionary of Transport Analysis*, pp. 458-460 Editors: Peter Nijkamp, Kenneth Button, and Henry Vega. 2010.
5. Ukkusuri, S. V., Hasan, S. and Zhan, X. Checking the Urban Pulse: Social Media Data Analytics for Transportation Applications *Best Practices for Transportation Agency Use of Social Media* . Chapter 4. 18 Pages. Editors: Kari Watkins and Susan Bergman. CRC Press. 2013.
6. Aziz, A. and Ukkusuri, S. V. An Approach to Assess the Impact of Dynamic Congestion in Vehicle Routing Problems *Advances in Dynamic Network Modeling in Complex Transportation Systems* . Chapter 11. Pages 265-287. Editors: Satish V Ukkusuri and Kaan Ozbay. Springer Publishers. 2013.
7. Qian, X., Zhan, X. and Ukkusuri, S. V. Characterizing Urban Dynamics Using Large Scale Taxicab Data *Engineering and Applied Sciences Optimization: Volume 1 - Dedicated to the memory of Professor M.G. Karlaftis* . Chapter 24. Pages 265-287. Editors: Nikos Lagaros. Springer Publishers. 2015.
8. Zhang, W., Qian, X. and Ukkusuri, S.V. Identifying the Temporal Characteristics of Intra-city Movement Using Taxi Geo-location Data Accepted in *Enriching Urban Spaces with Ambient Computing, the Internet of Things, and Smart City Design* (2016). Editors: Shin'ichi Konomi. IGI Global. 2016.
9. dos Reis Rezende, P., Sadri, A.M., and Ukkusuri, S.V. Social Network Influence on Mode Choice and Carpooling during Special Events: The Case of Purdue Game Day *Social Networks Analytics*, Elsevier Publications (2018).

- **Peer Reviewed Journal Publications**

  Note: "_" denotes a graduate student supervised by me, "*" indicates a post doc involved in the publication.

  1. Sun, D., Ukkusuri, S. V., Benekohal, R. F., Waller, S. T. and Liu, B. Fuzzy logic based online collision prediction system for signalized intersections. *Advances in Transportation Studies-An International Journal. Vol. 3*, pp.71-86 (July 2004).
  2. Sun, D., Ukkusuri, S. V., Benekohal, R. F., and Waller, S. T. Modeling of driver-pedestrian interaction at mid-block crosswalks. *Advances in Transportation Studies-An International Journal. Vol. 6*, pp. 57-73(July 2005).
  3. Kyunghwi, J., Lee, J. S., Ukkusuri, S. V., and Waller, S. T. New approach for relaxing computational complexity of discrete network design problem using selectorecombinative genetic algorithm. *Transportation Research Record: Journal of the Transportation Research Board (TRR)*. No. 1964, Transportation Research Board of the National Academies, Washington, D.C., pp. 91-103 (2006).
  4. Ukkusuri, S. V., and Waller, S. T. Single point approximations for the traffic equilibrium problem under uncertain demand. *Transportation Research Record: Journal of the Transportation Research Board (TRR)*. No. 1964, Transportation Research Board of the National Academies, Washington, D.C., pp. 169-175 (2006).
  5. Patil, G. and Ukkusuri, S. V. Stochastic system optimal network design problem (*Transportation Research Record: Journal of the Transportation Research Board (TRR)*). No. 2029, pp. 80-86 (2007).
  6. Barkan, C. P., Ukkusuri, S. V., and Waller, S. T. Optimizing the design of railway tank cars to minimize accident-caused releases. *Computers and Operations Research.*. Vol. 34, pp. 1266-1286 (2007)
  7. Ukkusuri, S. V., Tom,V. M., and Waller, S. T. Robust transportation network design under demand uncertainty. *Computer Aided Civil and Infrastructure Engineering*. Vol. 22, pp. 9-21 (2007).
  8. Ramadurai, G., and Ukkusuri, S. V. Dynamic traffic equilibrium: Theoretical and experimental network game results in the single bottleneck model. *Transportation Research Record: Journal of the Transportation Research Board (TRR)*. No. 2029, pp. 1-13 (2007).
  9. Ukkusuri, S. V. and Patil, G. Exploring user behavior in online network equilibrium problems. *Transportation Research Record: Journal of the Transportation Research Board (TRR)*. No. 2029, pp. 31-38 (2007).
  10. Holguin-Veras, J. H., Perez, N., Ukkusuri, S. V.,Wachtendorf, T. and Bethany, B. Emergency logistics issues in Hurricane Katrina: A synthesis and preliminary suggestions for improvement *Transportation Research Record: Journal of the Transportation Research Board (TRR)*. No. 2022, pp. 76-82 (2007).
  11. Karoonsoontawong, A., Ukkusuri, S. V., Waller, S. T. and Kockelman, K. Simulation based heuristic approach for dynamic marginal cost pricing *Journal of Transportation Research Forum*. Vol.47(4), pp.81-99 (2008).
  12. Ukkusuri, S. V. and Yushimito, W. Location routing problem for the humanitarian prepositioning problem. *Transportation Research Record: Journal of the Transportation Research Board (TRR)*. No. 2089, pp.18-25 (2008).

13. Ukkusuri, S. V., and Du, L. Geometric connectivity of vehicular Ad Hoc networks: Analytical characterization. *Transportation Research Part-C.* Vol. 16C(5), pp. 615-634 (2008).
14. Ukkusuri, S. V., and Waller, S. T. Linear programming models for the user and system optimal dynamic network design problem: Formulations, implementations and comparisons. *Networks and Spatial Economics.*Vol. 8(4), pp.383-406 (2008).
15. Ukkusuri, S. V. and Ramadurai, G. A comprehensive review of emerging technologies for congestion reduction and safety. *Transportation Research Record: Journal of the Transportation Research Board (TRR).* Vol. 2129, pp.101-110 (2009).
16. Ukkusuri, S. V. and Patil, G. Multi-period transportation network design under demand uncertainty. *Transportation Research Part B (Methodological).* Vol. 43(6), pp. 625-642(2009).
17. Sharma, S., Ukkusuri, S. V. and Mathew,T. V. A pareto optimal multi-objective optimization for the robust transportation network design problem. *Transportation Research Record: Journal of the Transportation Research Board (TRR).* Vol. 2090, pp.95-104 (2009).
18. Ukkusuri, S. V. and Yushimoto, W. A methodology to assess the criticality of highway transportation networks. *Journal of Transportation Security.* Vol 2(1), pp.29-46 (June 2009).
19. Miranda, L.M., Fu, L., Ukkusuri, S. V. and Lord, D. How to incorporate accident severity and vehicle occupancy into hotspot identification process? *Transportation Research Record: Journal of the Transportation Research Board (TRR).* Vol. 2102, pp.53-60 (2009).
20. Du, L., Ukkusuri, S. V. and Kalyanaraman, S. and Yushomito, W. Characterizing interference in vehicle Ad Hoc networks on freeway segments under various traffic flow conditions. *Transportation Research Part-C (Emerging Technologies).* Vol. 17C(6), pp. 571-585 (2009).
21. Ukkusuri, S. V. and Waller, S.T. Approximate analytical expressions for the traffic equilibrium problem under uncertain demand. *Transportation Letters: The International Journal of Transportation Research.* Vol. 2(2), pp. 111-124 (2010).
22. Ukkusuri, S. V. and Du, L. Relative mobility of vehicles improves the information propagation in vehicular Ad Hoc networks. *Networks and Spatial Economics.* Vol. 10(2), pp. 209-240 (2010).
23. Ukkusuri, S. V., and Ramadurai, G. and Patil, G. A robust signal control formulation accounting for traffic dynamics. *Computers and Operations Research.* Vol. 37 (5), pp. 869-879 (May 2010).
24. Ramadurai, G., and Ukkusuri, S. V. A dynamic superNetwork model accounting for activity participation in transportation networks. *Networks and Spatial Economics.* Vol. 10(2), pp. 273-292 (2010).
25. Ramadurai, G., Ukkusuri, S. V., Zhao, J, and Pang, J. S. Linear complementary formulation for the multi-user class single bottleneck problem *Transportation Research Part B: Methodological.* Vol. 44(2), pp. 193-214(2010).
26. Hasan, S. and Ukkusuri, S. V. A contagion model for understanding the propagation of hurricane warning information *Transportation Research Part B (Methodological.)* Vol. 45(10), pp. 1590-1605 (2011).

27. Hang, Y., Qu, M. and Ukkusuri, S.V. Optimizing the design of a solar cooling system using central composite design techniques *Energy and Buildings.* 43(4), pp. 988-994 (2011).
28. *Han, L., Ukkusuri, S.V. and Doan, K. Complementarity formulations for the dynamic user equilibrium with departure time choice, elastic demand and user heterogeneity *Transportation Research Part B (Methodological).* Vol. 45(10), pp. 1749-1767 (2011).
29. Doan, K., Ukkusuri, S.V., and *Han, L. On the existence of pricing strategies in the heterogeneous single bottleneck model and its extensions *Transportation Research Part B (Methodological).* Vol. 45(9), pp. 1483-1500 (2011).
30. Ukkusuri, S.V., Hasan, S. and Aziz, A. A random parameter model to explain the built environment effects of pedestrian crash frequency *Transportation Research Record: Journal of the Transportation Research Board.* Vol. 2237, pp. 98-106 (2011).
31. Ukkusuri, S. V., Wang, Y. and Chigan, T. Special Issue on Exploiting Wireless Communication Technologies in Vehicular Transportation Networks. *IEEE Transactions of Intelligent Transportation Systems .* Vol. 12(3), pp. 633-634 (2011).
32. Holguin-Veras, J., Ozbay, K., Kornhauser, A., Brom, M.A., Iyer, S., Yushimito, W.F., Ukkusuri, S.V. , Allen, B. and Silas, M. Overall impacts of off-peak delivery programs in New York metropolitan area *Transportation Research Record: Journal of the Transportation Research Board.* Vol. 2238, pp. 68-76 (2011).
33. Hasan, S., Ukkusuri, S. V., Gladwin, H. and Murray-Tuite, P. A behavioral model to understand household level hurricane evacuation decision making *ASCE Journal of Transportation Engineering.* Vol. 137(5), pp. 341-349 (2011).
34. Ukkusuri, S. V. and Patil, G. A sample average approximation method for the flexible network design problem *ASCE Journal of Computing in Civil Engineering.* 25(3), pp. 254-263 (2011).
35. Ramadurai, G. and Ukkusuri, S. V. B-Dynamic: An efficient algorithm for the dynamic user equilibrium in activity travel networks. *Computer Aided Civil and Infrastructure Engineering.* Vol. 26(4), 254-269 (2011).
36. Sharma, S., Mathew,T. V., and Ukkusuri, S. V. Approximation techniques for the transportation network design problem under demand uncertainty. *ASCE Journal of Computing in Civil Engineering* . Vol. 25(4), pp. 316-330 (2011).
37. Ukkusuri, S.V., *Han, L. and Kien, D. Dynamic user equilibrium with a path based cell transmission model for general traffic networks. *Transportation Research Part B (Methodological).* Vol. 46(10), pp. 1657-1684 (2012).
38. Doan, K. and Ukkusuri, S.V. On the holding back problem in cell transmission based dynamic traffic assignment models *Transportation Research Part B (Methodological).* Vol. 46(9), pp. 1218-1238 (2012).
39. Aziz, A. and Ukkusuri, S.V. Integration of environmental objectives in a system optimal dynamic traffic assignment model *Computer Aided Civil and Infrastructure Engineering.* Vol. 27(7), pp. 494-511(2012).
40. Pang, J. S., *Han, L., Ramadurai, G. and Ukkusuri, S. V. A continuous time linear complementarity system for dynamic equilibria in single bottleneck traffic flows *Mathematical Programming Part A.* Vol. 133(1), pp. 437-460 (2012).

41. Yushimito, W., Jaller, M. and Ukkusuri, S. V. Facility location in disasters: A voronoi based heuristic algorithm with an application to hurricane Katrina *Networks and Spatial Economics.* Vol. 12(1), pp. 21-39 (2012).
42. Hasan, S. , Mesa-Arango, R. and Ukkusuri, S. V. , Murray-Tuite, P. Transferability of hurricane evacuation models: Joint estimation model using multiple data sources. *ASCE Journal of Transportation Engineering.* Vol. 138(5), pp. 548-556 (2012).
43. Ukkusuri, S.V., Miranada, L., Ramadurai, G. and Isa, J. The role of built environment on pedestrian safety in New York City *Safety Science.* Vol. 50(4), pp. 1141-1151 (2012).
44. Zhan, X., Hasan, S., Ukkusuri, S.V. and Kamga, C. Urban travel time estimation using large scale taxi data with limited information. *Transportation Research Part C(Emerging Technologies).* Vol. 33, pp. 37-49 (2013).
45. Hasan, S., Schneider, C., Ukkusuri, S.V. and Gonzalez, M. Spatio-temporal patterns of urban human mobility. *Journal of Statistical Physics.* Vol. 151, Issue 1-2, pp. 304-318 (2013).
46. Collins, C., Hasan, S. and Ukkusuri, S.V. A novel transit rider satisfaction metric: Riders sentiment measured from online social media data. *Journal of Public Transportation.* Vol. 16(2), pp. 21-45 (2013).
47. Sadri, A.M., Ukkusuri, S.V. and Murray-Tuite, P. A random parameter probit model to understand the mobilization time in hurricane evacuations. *Transportation Research Part C(Emerging Technologies).* Vol. 32, pp. 21-30 (2013).
48. Aziz, A., Ukkusuri, S.V. and Hasan, S. Exploring the determinants of pedestrian-vehicle crash severity in New York City. *Accident Analysis and Prevention.* Vol. 50, pp. 1298-1309 (2013).
49. *Han, L. and Ukkusuri, S.V. A complementarity approach for an environmental-economic game with coupling emission constraints. *Environmental Modeling and Assessment.* Vol.18(2), pp. 147-158 (2013).
50. Mesa-Arango, R., Hasan, S., Ukkusuri, S.V. and Murray-Tuite, P. Household level models for hurricane evacuation destination choice using hurricane Ivan data. *Natural Hazards Review.* Vol. 14 (1), pp. 11-20 (2013).
51. Hasan, S. , Mesa-Arango, R. and Ukkusuri, S. V. A random parameter hazard based model to understand the temporal dynamics of household evacuation timing behavior. *Transportation Research Part C (Emerging Technologies.)* Vol. 27, pp. 108-116 (2013).
52. Murray-Tuite, P., Yin, W., Ukkusuri, S.V. and Gladwin, H. Changes in evacuation decisions between hurricane Ivan and Katrina *Transportation Research Record: Journal of the Transportation Research Board.* Vol. 2312, pp. 98-107 (2013).
53. Aziz, A. and Ukkusuri, S.V. Unified framework for dynamic traffic assignment and signal control with cell transmission model . *Transportation Research Record: Journal of the Transportation Research Board.* Vol. 2311, pp. 73-84 (2013).
54. Mohamed, M.G., Saunier, N., Miranda, L. and Ukkusuri, S.V. A clustering regression approach: A comprehensive injury severity analysis of pedestrian-vehicle crashes in New York, US and Montreal, Canada. *Safety Science.* Vol. 54, pp. 27-37 (2013).

55. Aziz, A. and Ukkusuri, S.V. Tradable Emission Credits for Personal Travel: A Market based approach to achieve air quality standards. *International Journal of Advances in Engineering Sciences.* Vol.5(2-3), pp.145-157 (2013).
56. Hasan, S. and Ukkusuri, S.V. Social contagion process in informal warning networks to understand evacuation timing behavior. Accepted in *Journal of Public Health Management and Practice.* (Invited) Vol. 19, pp. 68-69 (2013).
57. Zhu, F. and Ukkusuri, S.V. A cell based dynamic system optimum model with non-holding back flows. *Transportation Research Part C(Emerging Technologies).* Vol. 36, pp.367-380 (2013).
58. Mesa-Arango, R., Ukkusuri, S.V. and Sarmiento, I. A network flow methodology to estimate empty trips in freight transportation. *Transportation Research Record: Journal of the Transportation Research Board.* Vol.2378, pp.110-119 (2013).
59. Mesa-Arango, R. and Ukkusuri, S.V. Benefits of in-vehicle consolidation in less than truckload freight transportation operations *Transportation Research Part E (Freight Transportation and Logistics).* Vol. 60(7), pp.113-125 (2013).
60. Arif, S.M., Ukkusuri, S.V., Murray-Tuite, P. and Gladwin, H. How to Evacuate: A behavioral model to understand the routing strategies during hurricane evacuation. *ASCE Journal of Transportation Engineering.* Vol.140(1), pp.61-69 (2014).
61. Mesa-Arango, R. and Ukkusuri, S.V. Attributes driving the selection of trucking services and the quantification of the shipper's willingness to pay. *Transportation Research Part E (Freight Transportation and Logistics).* Vol. 71, pp. 142-158 (2014).
62. Aziz, H.M. and Ukkusuri, S.V. Exploring the trade-off between greenhouse gas emissions and travel time in daily travel decisions: Route and departure time choices *Transportation Research Part D (Transport and Environment).* Vol. 32, pp. 334-353 (2014).
63. Arif, S.M., Ukkusuri, S.V., Murray-Tuite, P. and Gladwin, H. Analysis of hurricane evacuee mode choice behavior. *Transportation Research Part C (Emerging Technologies).* Vol. 48, pp. 37-46 (2014).
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64. Yin, W., Murray-Tuite, P., Ukkusuri, S.V. and Gladwin, H. An agent based travel demand model for hurricane evacuation simulation. In Proceedings of 90th Transportation Research Board Meeting, National Academies (Washington D.C., January 2012). 16 pages.
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66. Aziz, H.M. and Ukkusuri, S.V. Unified Framework for Dynamic Traffic Assignment and Signal Control with Cell Transmission Model In Proceedings of 92nd Transportation Research Board Meeting, National Academies (Washington D.C., January 2013). 18 pages.
67. Arif, S.M., Ukkusuri, S.V., Murray-Tuite, P. and Gladwin, H. Analysis of hurricane evacuee mode choice behavior. In Proceedings of 92nd Transportation Research Board Meeting, National Academies (Washington D.C., January 2013). 16 pages.
68. Zhan, X., Aziz, H.M. and Ukkusuri, S.V. Alternative Ordered Response Frameworks for Examining Pedestrian Injury Severity in New York City. In Proceedings of 92nd Transportation Research Board Meeting, National Academies (Washington D.C., January 2013). 22 pages.
69. Aziz, H.M., Zhu, F. and Ukkusuri, S.V. Reinforcement Learning-Based Signal Control Using R-Markov Average Reward Technique (RMART) Accounting for Neighborhood Congestion Information Sharing. In Proceedings of 92nd Transportation Research Board Meeting, National Academies (Washington D.C., January 2013). 34 pages.
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71. Arif, S.M., Ukkusuri, S.V., Murray-Tuite, P. and Gladwin, H. How to Evacuate? A Model to Understand the Routing Strategies During Hurricane Evacuation. In Proceedings of 92nd Transportation Research Board Meeting, National Academies (Washington D.C., January 2013). 19 pages.
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73. Hasan, S. and Ukkusuri, S.V. Understanding Urban Human Activity and Mobility Patterns Using Large-Scale Location-Based Data from Online Social Media. In Proceedings of 92nd Transportation Research Board Meeting, National Academies (Washington D.C., January 2013). 24 pages.
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76. Zhan, X., Hasan, S. and Ukkusuri, S.V. Understanding Urban Mobility and Human Activity Patterns using Large Scale Location based Data In *Proceedings of 3rd UrbComp 2013 Workshop* (Chicago., August 2013). *Acceptance Rate: 20%*
77. Qian, X., Zhan, X. and Ukkusuri, S.V. Characterizing Urban Dynamics Using Large Scale Taxicab Data In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2014). 20 pages.
78. Zhan, X., Aziz, H.M. and Ukkusuri, S.V. A Multivariate Poisson-Lognormal (MVPLN) Model for Pedestrian-Vehicle Crashes in New York City Accounting for General

Correlations Among the Severity Levels In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2014). 21 pages.

79. Ukkusuri, S.V., Zhan, X., Arif, S.M. and Ye, Q. Exploring Crisis Informatics Using Social Media Data: A Study on 2013 Oklahoma Tornado In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2014). 19 pages.
80. Parikh, P., Luong, B. and Ukkusuri, S.V. Metaheuristic Approach for Repositioning Bicycles in a Public Bike-Sharing System In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2014). 16 pages.
81. Arif, S.M., Ukkusuri, S.V., Murray-Tuite, P. and Gladwin, H. Understanding the Mode Choice Behavior of Miami Beach Residents during Hurricane Evacuation In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2014). 21 pages.
82. Zhan, X. and Ukkusuri, S.V. Measuring the Efficiency of Urban Taxi Service System In *Proceedings of 3rd UrbComp 2014 Workshop* (New York City., August 2014). *Acceptance Rate: 20%*
83. Feng, Z. and Ukkusuri, S.V. On dynamic information propagation through inter-vehicular communications In *Proceedings of the 19th International conference of Hong Kong Society of Transportation Studies (HKSTS)* (Hong Kong, December 2014).
84. Arif, S.M., Lee, S. and Ukkusuri, S.V. Exploring the effects of social ties on joint trip frequency: An ego-centric social network approach In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
85. Aziz, H.M., Romero, J. and Ukkusuri, S.V. Understanding short-term travel behavior under personal mobility credit allowance scheme using experimental economics. In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
86. Hasan, S. and Ukkusuri, S.V. Location contexts of user check-ins to model geo life-style patterns In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
87. Parikh, P. and Ukkusuri, S.V. Estimation of optimal inventory levels at stations of a bicycle sharing system In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
88. Mesa-Arango, R., Narayanan, B. and Ukkusuri, S.V. The impact of international crises on maritime transportation based global value chains In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
89. Zhan, X., Qian, X. and Ukkusuri,S.V. A graph based approach to measuring the efficiency of urban taxi service system In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
90. Zhan, X. and Ukkusuri, S.V. A probabilistic urban link travel time estimation using large-scale taxi data In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).

91. Zhu, F. and Ukkusuri, S.V. On Learning based Intersection Signal Control with Partial Information from Connected Vehicles In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
92. Qing, Y., Xiao, F., Peng, Q. and Ukkusuri, S.V. Regulating the peak incoming passenger flow in subways systems In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
93. Aziz, H.M. and Ukkusuri, S.V. Finding the link driving schedules LDS for integrated traffic emissions EPA-MOVES simulator by clustering with dynamic time warping measures In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
94. Mesa-Arango, R. and Ukkusuri, S.V. Pricing and demand segmentation of bids in truckload combinatorial auctions In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
95. Qian, X. and Ukkusuri, S.V. Exploring the spatial variation of the urban taxi ridership using geographically weighted regression In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
96. Zhu, F. and Ukkusuri, S.V. Accounting for traffic oscillation under the mixed connected vehicle environment in microscopic traffic simulation In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
97. Zhu, F. and Ukkusuri, S.V. A linear programming formulation for autonomous intersection control and dynamic traffic assignment under the connected vehicle environment In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
98. Zhu, F. and Ukkusuri,S.V. On dynamic information propagation in vehicular ad-hoc networks. In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
99. Zhan, X., Li, R. and Ukkusuri, S.V. Lane-based real time queue length estimation using license-plate recognition data. In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
100. Arif, S.M., Ukkusuri, S.V, Murray-Tuite, P. and Gladwin, H. Hurricane evacuation routing strategy from Miami Beach: Choice of major bridges. In Proceedings of 93rd Transportation Research Board Meeting, National Academies (Washington D.C., January 2015).
101. Arif, S.M., Ukkusuri, S.V. and Gladwin, H. Characterizing the social network influence on evacuation behavior during hurricanes. In Proceedings of 2015 International Association of Travel Behavior Research Conference (London, U.K., June 2015).
102. Zhang, B., Chan, W.K. and Ukkusuri, S.V. Adaptive Routing and Guidance Approach for Transportation Evacuation. In Proceedings of 2015 Winter Simulation Conference (Huntington Beach, CA, December 2015).
103. Qian, X. and Ukkusuri, S.V. Global learning particle swarm optimizer for the network design problem. In Proceedings of 2016 World Conference in Transport Research (Shanghai, China, June 2016).

104. Zhan, X. and Ukkusuri, S.V. Spatial Dependency of Urban Sprawl and Underlying Road Network Structure. In Proceedings of 2016 World Conference in Transport Research (Shanghai, China, June 2016).
105. Sarwar, T., Anastasopoulos, P., Ukkusuri, S.V., Murray-Tuite, P., and Mannering, F. A statistical analysis of the dynamics of household hurricane evacuation decisions. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
106. Mesa-Arango, R. and Ukkusuri, S.V. Pricing and segmentation of stochastic demand in truckload combinatorial bids. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
107. Zhang, W. and Ukkusuri, S.V. How do vacant taxi drivers find the next customer? Empirical findings on vacant taxi customer search behaviors. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
108. Zhang, W., Ukkusuri, S.V. and Lu, J. Identifying the determinants of the empty taxi trip duration using limited geolocation data. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
109. Mesa-Arango, R. and Ukkusuri, S.V. Pricing and segmentation of stochastic demand in less than truckload combinatorial bids. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
110. Zhu, F. and Ukkusuri, S.V. Modeling the proactive driving behavior of connected vehicles: Cell based simulation model. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
111. Reis Rezende, P., Sadri, A.M. and Ukkusuri, S.V. Social network influence on mode choice and carpooling during special events: The case of Purdue game day. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
112. Yang, C., Yan, F. and Ukkusuri, S.V. Unraveling traveler mobility patterns in Shenzhen metro system. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
113. Yin, W., Murray-Tuite, P., Ukkusuri, S.V. and Gladwin, H. Modeling shadow evacuation for hurricanes using a random parameters logit model. In Proceedings of 94th Transportation Research Board Meeting, National Academies (Washington D.C., January 2016).
114. Sadri, A.M., Ukkusuri, S.V. and Gladwin, H. The role of social networks, information sources and household characteristics on hurricane Sandy evacuation decision making. In Proceedings of the National Evacuation Conference (New Orleans, March 2016).
115. Lee, S., Sadri, A.M., Ukkusuri, S.V. and Clawson, R. Personal Network Structure and Post-Disaster Recovery Experiences in Tornado-Affected Communities. In Proceedings of the Sunbelt Conference (Long Beach, April 2016).
116. Zhu, F. and Ukkusuri, S.V. Efficient System States in Dynamic Traffic Systems. In Proceedings of the International Symposium of Dynamic Traffic Assignment (Sydney, June 2016).

117. Qian, X., Yan, F., Yang, C. and Ukkusuri, S.V. Short Term Taxi Demand Forecasting using Gaussian Conditional Random Field Model. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
118. Miralinaghi, M., Peeta, S. and Ukkusuri, S.V. Managing Morning Commute Congestion with Tradable Credit Scheme Under Commuter Heterogeneity and Loss Aversion. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
119. Gehlot, H., Sadri, A.M. and Ukkusuri, S.V. Joint Estimation of Evacuation Departure and Travel Times using Hurricane Sandy Data. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
120. Zhang, Y., Zhan, X., Yang, C. and Ukkusuri, S.V. Activity Chain Inference using Tensor Based Collaborative Filtering. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
121. Zhang, W., Qian, X. and Ukkusuri, S.V. Evolution of Spatio-Temporal Patterns of Taxi Operations. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
122. Zhang, W., Le, T. and Ukkusuri, S.V. Operations and Pricing of Optimal Taxi Group Ride Problem. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
123. Sadri, A.M., Hasan, S. and Ukkusuri, S.V. Understanding Social Interaction Networks for Planned Special Events from Twitter. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
124. Qian, X., Yang, C. and Ukkusuri, S.V. The Spatial Autoregressive Simultaneous Equation Model for Daily Taxi and Uber ridership. In Proceedings of the 95th Transportation Research Board Meeting, National Academies (Washington D.C., January 2017).
125. Zischg, J., Klinkhamer, C., Zhan, X.,Krueger, E., Ukkusuri, S.V., Rao, P.S.C., Rauch, W., and Sitzenfrei, R. Evolution of Complex Network Topologies in Urban Water Infrastructure. In Proceedings of the World Environmental and Water Resources Congress, pp. 648-659 (Sacramento, California, May 2017).
126. Zhang, W., *Kumar, D. and Ukkusuri, S.V. Exploring the Dynamics of Surge Pricing in Mobility-on-Demand Taxi Services. In Proceedings of the IEEE Big Data 2017 Conference, (Boston, December 2017), pp. 1375-1380 (2018). Acceptance Rate: 20%
127. *Kumar, D. and Ukkusuri, S.V. Utilizing Geo-tagged Tweets to Understand Evacuation Dynamics during Emergencies: A case study of Hurricane Sandy. WWW 2018 Workshop on Exploitation of Social Media for Emergency Relief and Preparedness (SMERP), pp. 1613-1620 (Lyon, France April 2018).
128. Gehlot, H. and Ukkusuri, S.V. Policy based routing with link transmission model in dynamic traffic networks. Proceedings of the International Symposium of Dynamic Traffic Assignment (DTA 2018), (Hong Kong, July 2018).
129. Sagir, F. and Ukkusuri, S.V. Mobility Impacts of Autonomous Vehicle Systems. Proceedings of the IEEE International Conference on Intelligent Transportation Systems (ITSC 2018), pp. 485-490 (Hawaii, November 2018).

130. Damera, A., Gehlot, H., Ukkusuri, S.V., Murray-Tuite, P., Gurt, Y., and Lee, S. Modeling the sequencing of evacuation destination and accommodation type in hurricanes. Accepted for presentation at *Transportation Research Board Conference* (2019).
131. Le, T. and Ukkusuri, S.V. Influencing factors that determine the usage of the Crowdshipping services. Accepted for presentation at *Transportation Research Board Conference* (2019).
132. Ahmed, A., Ukkusuri, S.V., Mirza, S., and Jafri, A. Width based Cell Transmission model for heterogeneous and undisciplined traffic streams. Accepted for presentation at *Transportation Research Board Conference* (2019).
133. Chen, S., Pan, Y., Qiao, F., Ukkusuri, S.V. and Tang, K. Estimation of emissions for buses fueled with liquefied natural gas using gradient boosted regression trees. Accepted for presentation at *Transportation Research Board Conference* (2019).
134. *Kumar, D. , Yabe, T. and Ukkusuri, S.V. Social-Media aided Hyperlocal Help-Network Matching and Routing during Emergencies. In Proceedings of the IEEE Big Data 2018 Conference, (Seattle, December 2018), pp. 1375-1380 (2019). Acceptance Rate: 25%
135. Gehlot, H., Sundaram, S. and Ukkusuri, S.V. Optimal Sequencing Policies for Recovery of Physical Infrastructure After Disasters. In Proceedings of the IEEE American Control Conference (ACC) 2019, (Philadelphia, July 2019). Acceptance Rate: 60%
136. Yabe, T., Tsubouchi, K., Sekimoto, Y. and Ukkusuri, S.V. Predicting Evacuation Decisions using Representations of Individuals' Pre-Disaster Web Search Behavior. In Proceedings of the 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining 2019, (Anchorage, August 2019). Acceptance Rate: 20%
137. Qian, X., Xue, J., Sobelevsky, S., Chao, Y. and Ukkusuri, S.V. Stationary Spatial Charging Demand Distribution for Commercial Electric Vehicles in Urban Area. Proceedings of the IEEE International Conference on Intelligent Transportation Systems (ITSC 2019), pp. 220-225 (Auckland, NZ, October 2019).
138. Lei, Z., Qian, X.. and Ukkusuri, S.V. Optimal Proactive Vehicle Relocation for On-Demand Mobility Service with Deep Convolution-LSTM Network. Proceedings of the IEEE International Conference on Intelligent Transportation Systems (ITSC 2019), pp. 281-286 (Auckland, NZ, October 2019).
139. Zhang, W. and Ukkusuri, S.V. Flexible Supply of App-based Taxi Services: Modeling the Driver Partners' Platform-Exiting Behaviors. Proceedings of the IEEE International Conference on Intelligent Transportation Systems (ITSC 2019), pp. 549-554 (Auckland, NZ, October 2019).
140. Gehlot, H., Sundaram, S. and Ukkusuri, S.V. Optimal Sequencing Policies for Recovery of Physical Infrastructure After Disasters. Proceedings of the 8th IFAC Workshop on Distributed Estimation and Control in Networked Systems, (NecSys 2019)
141. Yabe, T., Tsubouchi, K., Sekimoto, Y. and Ukkusuri, S.V. City2City: Translating Place Representations across Cities. Accepted in SIGSPATIAL '19: ACM International Conference on Advances in Geographic Information Systems (Chicago, November 2019). Acceptance Rate: 21%
142. Qian, X., Xue, J. and Ukkusuri, S.V. Modeling Disease Spreading with Adaptive Behavior Considering Local and Global Information Dissemination. Accepted for presentation at Transportation Research Board Conference (2020).

143. Qian, X., Xue, J., Sobolevsky, S., Yang, C. and Ukkusuri, S.V. Optimal Charging Infrastructure Planning for Commercial Electric Vehicles with Stationary Spatial Demand Distribution. Accepted for presentation at Transportation Research Board Conference (2020).
144. Lei, Z., Qian, X., Chen, X. and Ukkusuri, S.V. Real-time Ridesharing for Transportation Hubs with Demand and Supply Uncertainty. Accepted for presentation at Transportation Research Board Conference (2020).
145. Qian, X., Xue, J., Lei, Z., Suarez, J. and Ukkusuri, S.V. Demand-adaptive Transit Design for Urban Transportation Hubs. Accepted for presentation at Transportation Research Board Conference (2020).
146. Qian, X., *Lei, T., Xue, J., Lei, Z. and Ukkusuri, S.V. Understand the Impact of Taxi Network Companies on Urban Traffic Using Large-Scale Trajectory Data. Accepted for presentation at Transportation Research Board Conference (2020).
147. Xue, J., Gehlot, H. and Ukkusuri, S.V. Braess's paradox in scale-free networks. Accepted by the 8th International Symposium on Dynamic Traffic Assignment (DTA 2020)
148. Chen, X., Xue, J., Qian, X., Suarez, J. and Ukkusuri, S.V. Online energy-optimal routing for electric vehicles with combinatorial multi-arm semi-bandit. Proceedings of the IEEE International Conference on Intelligent Transportation Systems (ITSC 2020), pp. 1-6 (Rhodes, Greece, September 2020).
149. Yabe, T., Tsubouchi, K., Shimizu, T., Sekimoto, Y. and Ukkusuri, S.V. Unsupervised Translation via Hierarchical Anchoring: Functional Mapping of Places across Cities. Accepted in the 26th ACM SIGKDD Conference on Knowledge Discovery and Data Mining 2020 (San Diego, August 2020). Acceptance Rate: 15%
150. Qian, X., Xue, J. and Ukkusuri, S.V. Modeling Disease Spreading with Adaptive Behavior Considering Local and Global Information Dissemination. Accepted for presentation at Transportation Research Board Conference (2021).
151. Gehlot, H., Sundaram, S. and Ukkusuri, S.V. Optimal Sequencing Policies for Recovery of Physical Infrastructure After Disasters. Accepted in American Control Conference 2021(ACC 2021).
152. *Mondal, W. U., Agarwal, M., Aggarwal, V. and Ukkusuri, S.V. On the Approximation of Cooperative Heterogeneous Multi-Agent Reinforcement Learning (MARL) using Mean Field Control (MFC). Accepted in Cooperative AI workshop at 35th Neural Information Processing Systems (NeurIPS), 2021. (Best Paper Award)
153. Verma, R., Lei, Z., Xue, J., Shen, J., Gehlot, H., Ukkusuri, S. V., And Murray-Tuite, P. How information heterogeneity influences traffic congestion during hurricane evacuation. In 2021 IEEE International Intelligent Transportation Systems Conference (ITSC) (pp. 1833-1838). IEEE.
154. Xue, J. and Ukkusuri, S.V. A Spatial Partitioning Algorithm of Urban Road Networks Based on Percolation Curves. Accepted for presentation at Transportation Research Board Conference (2022).
155. Chen, X., Lei, Z. And Ukkusuri, S. V. Prediction of Road-level Energy Consumption of Battery Electric Vehicles. Accepted by the IEEE International Conference on Intelligent Transportation Systems (ITSC 2022).

156. Xue, J., Yabe, T., Tshubochi, K., Ma, J. and Ukkusuri, S.V. Multiwave COVID-19 Prediction via Social Awareness-Based Graph Neural Networks using Mobility and Web Search Data. Accepted in the 28th ACM SIGKDD Conference on Knowledge Discovery and Data Mining 2022 (Washington DC, August 2022). Acceptance Rate: 25.9% (195/753)
157. *Mondal, W. U., Aggarwal, V. and Ukkusuri, S.V. Can Mean Field Control (MFC) Approximate Cooperative Multi-Agent Reinforcement Learning (MARL) with Non-Uniform Interaction? Accepted in Proceedings of the 38th Conference on Uncertainty in Artificial Intelligence (UAI 2022), PMLR 180:1371-1380. Acceptance Rate: 30%
158. Mittal, S., Arroyo Arroyo, F. and Ukkusuri, S. V. Estimating modal split using mobile phone location data: A case study of Bamako. In the 11th Triennial Symposium on Transportation Analysis conference (TRISTAN XI) (Mauritius Island, June 2022)
159. Xue, J., Park, S., *Mondal, W.U., *Reia, S.M. and Ukkusuri, S.V. Supporting Post-disaster Recovery with Agent-based Modeling on Multilayer Social-physical Networks. Accepted for presentation at Transportation Research Board Conference (2023).
160. Ka, E., Xue, J., and Ukkusuri, S.V. A Physics-Informed Machine Learning for Estimating Traffic State with a Generalized Bathtub Model in Large-scale Urban Networks. Accepted for presentation at Transportation Research Board Conference (2023).
161. Lei, Z. and Ukkusuri, S.V. On the cyber risks in autonomous mobility on-demand services. Accepted for presentation at Transportation Research Board Conference (2023).
162. Ka, E. and Ukkusuri, S.V. Dynamic Routing Games for Connected and Autonomous Vehicles with Traffic Congestion: A Mean Field Game Approach. Accepted for presentation at INFORMS Annual Meeting (2023).
163. Xue, J., Ka, E., Mondal, W.U., and Ukkusuri, S.V. Generating network-level dynamic traffic equations using symbolic regression. Accepted for presentation at Transportation Research Board Conference (2024).
164. Ka, E., Xue, J., and Ukkusuri, S.V. PIDL-PedFlow: A Physics-Informed Deep Learning Approach for Macroscopic Continuum Pedestrian Flow Modelling. Accepted for presentation at Transportation Research Board Conference (2024).

Project Funding and Involvement

- **Summary**: Total Research Funding (2006-present): $23.83 million; Total Research Funding as a PI: $17.58 million
- Prof. Ukkusuri has established a strong research program in the areas of smart cities, resilience of coupled networks and connected and autonomous vehicles. His strong belief is that the funding obtained should be a catalyst and propel teams to do impactful research and discovery. He has declined funding in the past when he felt that it will not lead to significant research outputs.
- Prof. Ukkusuri has obtained funding from a variety of highly competitive sources (NSF, DOE), state agencies (INDOT, NYSDOT, NYCDOT etc), industry (Ford, Yahoo Japan, Google) and foundations (Mellon). Of particular note are two highly competitive NSF grants on disaster management and resilience each around $ 2.5 million and a very competitive $1.2 million DOE project on autonomous electric vehicle impacts on cities.
- Dr. Ukkusuri worked towards the establishment of an interdisciplinary transportation cyber-security center on Purdue campus in 2023.
- Dr. Ukkusuri has new programs under contract: most notable are a $4 million DOE NREL proposal on Electric Vehicles for Transit Operations.
- **Purdue University**

1. *USDOT/Clemson: A Multi-Resolution Simulation Platform for Transportation System Security Testing and Evaluation.*
   co-PI(PIs: Yiheng Feng, Hadi Amini)) ,
   Time of award: January 1, 2024 – December 31, 2024
   Agency Sponsor: USDOT
   Funds: $340,000 (including cost share)
   My responsibility: 25% of the contract.

2. *USDOT/Clemson: Finding Vulnerabilities of Autonomous Vehicle Stacks to Physical Adversaries.*
   co-PI(PIs: Berkay Celik, Alvaro Cardenas)) ,
   Time of award: January 1, 2024 – December 31, 2024
   Agency Sponsor: USDOT
   Funds: $380,000 (including cost share)
   My responsibility: 25% of the contract.

3. *USDOT/Clemson: Hybrid classical-quantum AI approach for detecting cyberattacks in vehicles.*
   co-PI(PIs: Shaozhi Li, Vaneet Aggarwal, Gurcan Comert)) ,
   Time of award: January 1, 2024 – December 31, 2024
   Agency Sponsor: USDOT
   Funds: $380,000 (including cost share)
   My responsibility: 20% of the contract.

4. *USDOT/Clemson: Cybersecurity Testbed for Connected and Autonomous Vehicles.*
   PI(co-PI: Mansoureh Jeihani, Mashrur Chowdhury)) ,
   Time of award: January 1, 2024 – December 31, 2024
   Agency Sponsor: USDOT
   Funds: $430,000 (including cost share)
   My responsibility: 50% of the contract.

5. *JTRP/INDOT: Simulating current and future EV growth scenarios in Indiana.*
   PI(co-PI: Nadia Gkritza)) ,
   Time of award: October 15, 2023 – December 31, 2026
   Agency Sponsor: INDOT
   Funds: $371,317
   My responsibility: 70% of the contract.

6. *JTRP/INDOT: Training Gap Analysis for INDOT workforce.*
   co-PI(PI: Steven Dunlop)) ,
   Time of award: October 15, 2023 – October 14, 2025
   Agency Sponsor: INDOT
   Funds: $213,500
   My responsibility: 35% of the contract.

7. *NSF SAI: Large-scale Planning for Electric Vehicle Public Charging Infrastructure,*
   co-PI (PI: Xinwu Qian, Co-PI: Chien-fei Chen, Steven Jones, Torsten Reimer) ,
   Time of award: October 1, 2023 – September 30, 2026
   Agency Sponsor: NSF
   Funds: $749,902
   My responsibility: 20% of the contract.

8. *USDOT: National Center for Transportation Cybersecurity and Resiliency (TRACR).*
   PI(co-PI: Dongyan Xu, Vaneet Aggarwal, Aniket Kate, Berkay Celik and Yiheng Feng)),
   Purdue is a major partner with 8 other universities and Clemson University as the lead
   Time of award: May 1, 2023 – April 30, 2029
   Agency Sponsor: USDOT University Transportation Center Program
   Funds: Approximately $7.5 million (including 1:1 cost share) (Total center funding: $40 million including cost share)
   My responsibility: 70% of the contract.

9. *JTRP/INDOT: Accessibility, Equity and Environmental Justice Measures of Infrastructure facilities in Indiana.*
   PI(co-PI: Nadia Gkritza)) ,
   Time of award: October 15, 2022 – October 14, 2024
   Agency Sponsor: INDOT
   Funds: $224,013
   My responsibility: 70% of the contract.

10. *JTRP/INDOT: Electric vehicles: public perceptions, expectations, and willingness-to-pay across highway user groups (vehicle classes).*

co-PI(PI: Nadia Gkritza)) ,
Time of award: August 15, 2022 – August 14, 2024
Agency Sponsor: INDOT
Funds: $240,634
My responsibility: 30% of the contract.

11. *NSF RAPID: Collaborative Research: Examining Household Movements and Evacuation Decision-Making in a Compounding Risk Event,*
PI (Other PI: Laura Siebeneck) ,
Time of award: January 1, 2022 – December 31, 2023
Agency Sponsor: NSF
Funds: $100,000
My responsibility: 50% of the contract.

12. *JTRP/INDOT: Economic Effect of Active Transportation Features and Association of Healthcare Industry and Transportation.*
co-PI(PI: Ananth Iyer)) ,
Time of award: August 1, 2021 – July 31, 2023
Agency Sponsor: INDOT
Funds: $254,680
My responsibility: 33% of the contract.

13. *JTRP/INDOT: Forecasting shifts in long-term passenger and micro-freight travel demand in Indiana.*
co-PI(PI: Nadia Gkritza)) ,
Time of award: November 1, 2021 – October 31, 2023
Agency Sponsor: INDOT
Funds: $342,386
My responsibility: 25% of the contract.

14. *Collaborative Research on AI methods in COVID-19 and Mobility*
PI
Time of award: April 1, 2021 – September 30, 2024
Agency Sponsor: Yahoo! Japan
Funds: $36,500
My responsibility: 100% of the contract.

15. *Convergence Accelerator Phase I (RAISE): The Urban Flooding Open Knowledge Network*
senior personnel (PI: Lilit Yeghiazarian)) ,
Time of award: September 1, 2019 – August 31, 2020
Agency Sponsor: NSF
Funds: $1 million
My responsibility: 5% of the contract.

16. *Integrated recovery modeling of cities after disasters,*
co-PI (PI: Mohammad Jahanshani, Venkatesh Merwade, Jie Shan, David Yu)) ,

Time of award: January 1, 2019 – December 31, 2019
Agency Sponsor: Lyles School of Civil Engineering
Funds: $30,000
My responsibility: 20% of the contract.

17. *Multi-modal trip scheduling in real-time platform to optimize energy efficient travel demand,*
PI (co-PI: Milind Kulkarni, Stanislav Sobolevsky (New York University)) ,
Time of award: January 1, 2019 – December 31, 2020
Agency Sponsor: Department of Energy (DOE)
Funds: $1.2 million
My responsibility: 70% of the contract.

18. *Resilience Modeling in Cities,*
PI (co-PI: Suresh Rao),
Time of award: January 1, 2018 – December 31, 2018
Agency Sponsor: Ford Foundation
Funds: $129,300
My responsibility: 75% of the contract.

19. *NSF Hurricane Harvey RAPID: Returning behavior of evacuees in Hurricane Harvey,*
PI (co-PI: Seungyoon Lee and Shreyas Sundaram) ,
Time of award: October 1, 2017 – October 31, 2018
Agency Sponsor: NSF
Funds: $40,000
My responsibility: 55% of the contract.

20. *JTRP/INDOT : Safety Impacts of Right Turn Lanes at Intersections,*
PI,
Time of award: January 1, 2018 – December 31, 2019
Agency Sponsor: INDOT
Funds: $164,403
My responsibility: 100% of the contract.

21. *NSF CRISP Type 2: Collaborative Research: Critical Transitions in the Resilience and Recovery of Interdependent Social and Physical Networks,*
Lead PI (co-PI: Seungyoon Lee, Shreyas Sundaram and Laura Siebeneck) ,
Time of award: January 1, 2017 – December 31, 2020
Agency Sponsor: NSF
Funds: $2.5 million
My responsibility: 60% of the contract.

22. *INDOT : Tactical Guidance for Indiana Transportation for the Connected and Autonomous Vehicles Future,*
PI,
Time of award: December 1, 2016 – May 30, 2018,

Agency Sponsor: INDOT
Funds: $200,000
My responsibility: 100% of the contract.

23. *NSF Hazards SEES: Bridging Information, Uncertainty and Decision-Making in Hurricanes using an Interdisciplinary Perspective,*
Lead PI (co-PI: Seungyoon Lee, Pamela Murray-Tuite, Yue Ge, Seungyoon Lee and Milind Kulkarni) ,
Time of award: November 1, 2015 – October 31, 2020
Agency Sponsor: NSF
Funds: $2.5 million
My responsibility: 45% of the contract.

24. *Novel techniques to develop link-driving schedules for MOVES,*
PI ,
Time of award: January 1, 2015 – May 30, 2017,
Agency Sponsor: USDOT
Funds: $140,000 (including cost share)
My responsibility: 100% of the contract.

25. *INDOT Synthesis Project: Best practices for maximizing driver attention at work zones,*
PI (co-PI: Nadia Gkritza) ,
Time of award: December 1, 2014 – August 1, 2015,
Agency Sponsor: INDOT
Funds: $45,000
My responsibility: 75% of the contract.

26. *INDOT: Evaluate the impacts of time of day tolling on Indiana roadways,*
PI (co-PI: Samuel Labi) ,
Time of award: October 1, 2014 – September 30, 2016,
Agency Sponsor: INDOT
Funds: $240,000
My responsibility: 80% of the contract.

27. *Resilient Communities: Strengthening Post-Disaster Recovery by Understanding Interdependent Social and Physical Networks,*
co-PI (PI: Suengyoon Lee, Other co-PIs: Rosalee Clawson, Daniel Aldrich, Daniel Kelly, Justin Siepel, Megan Nelson, Abhi Deshmukh) ,
Time of award: September 1, 2014 – August 31, 2015,
Agency Sponsor: Mellon Foundation
Funds: $68,000
My responsibility: 31% of the contract.

28. *USDOT :A decision support tool to locate shelters in emergencies,*
PI (co-PI:Yanfeng Ouyang) ,
Time of award: August 1, 2013 – July 3, 2014 (1 year),

Funds: $240,000 (including cost share)
My responsibility: 50% of the contract.

29. *NSF: From warnings to evacuation in hurricanes using an interdisciplinary approach,*
PI (co- PI: Hugh Gladwin, Florida International University) ,
Time of award: January 1, 2011 – December 31, 2015,
Funds: $495,000
My responsibility: 80% of the contract.

30. *USDOT :A agent based model for the adaptive traffic signal systems,*
co- PI (PI:Ray Benekohal (University of Illinois)) ,
Time of award: March 1, 2011 – February 28, 2012 (1 year),
Funds: $160,000
My responsibility: 50% of the contract.

31. *USDOT :A decision support tool to model short term freight disruptions,*
PI (co- PI:Fred Mannering, Amlan Mitra) ,
Time of award: March 1, 2011 – February 28, 2012 (1 year),
Funds: $90,000
My responsibility: 80% of the contract.

32. *GPRI :Network Resilience in Disasters: An International, Interdisciplinary Perspective,*
PI (co- PI:Daniel Aldrich) ,
Time of award: December 1, 2010 – November 30, 2011 (1 year),
Funds: $40,000
My responsibility: 60% of the contract.

33. *NSF: Collaborative Proposal: Dynamic equilibrium in Transportation and Telecommunication Networks,*
PI (Other PI: Elliot Anshelevich and Koushik Kar) ,
Time of award: September 1, 2010 – August 31, 2013 (3 years),
Funds: $500,000
My responsibility: 35% of the contract.

34. *NSF: Collaborative Proposal: Integrating Networking and Real Time Signal Control for Urban Transportation Networks,*
PI (Other PI: Nick Maxemchuck) ,
Time of award: January 1, 2010 – December 31, 2012 (3 years),
Funds: $500,000
My responsibility: 50% of the contract.

35. *NSF: Collaborative Proposal: Incorporating Household Decision Making with Dynamic Transportation Modeling in Hurricane Evacuation: An Integrated Social Science-Engineering Approach*
Lead PI (Other PIs: Victor Chan, Elliot Anshelevich, Florida International University (Hugh Gladwin, Fang Zhao) and Virginia Polytechnic Institute (Pam Murray-Tuite))

Time of award: January 1, 2009 – December 31, 2012,
Funds: $765,000
My responsibility: 60% of the contract at Purdue.

36. *Pedestrian Fatality and Severe Injury Accidents in New York City,*
PI from Purdue (Lead PI: Allison deCerreno)
Time of award: January 1, 2008 – November 6, 2010,
Funds: $110,000
Agency Sponsor: New York City Department of Transportation
My responsibility: 100% of the contract

37. *Integrative Freight Demand Management in New York Metropolitan Area*
co-PI, (Other PI's: Jose Holguin-Veras, Kaan Ozbay, Allison de Cerreno and Alain Kornhauser),
Time of award: July 1, 2007 – April 30, 2010,
Funds: Total Project Costs: $1.865 million; Cost Share: $640,000; RPI U.S.DOT funds $800,000
Program: Remote and Sensor Technology Initiative at U.S. Department of Transportation,
My responsibility: $45,000. Remaining portion of my funds left at RPI

38. *Analysis and Design of Large Scale Robust Transportation Networks,*
PI (Other PI: Tom V Mathew),
Time of award: May, 2007 – April, 2010 (3 years),
Funds: Total Funds: $14,000; Mainly for travel and lodging at IIT Bombay.
Agency Sponsor: Selected as one of the 20/254 projects for the Collaborative Project for Scientists and Technologists of Indian Origin (CP-STIO) program by the Department of Science and Technology (DST), Government of India.
My responsibility: 100% of the contract.

- **Rensselaer Polytechnic Institute**

1. *New York City Park and Ride Study,*
Lead PI (Other collaborators: Jack Reilly (Consultant and Adjunct Faculty) and Jose Holguin-Veras)
Time of award: February 1, 2009 – September 30, 2010 (1 year),
Funds: $230,000
Agency Sponsor: New York State Department of Transportation/UTRC.
My responsibility: 100% of the contract.

2. *A Smarter I-278 Corridor: Moving People, Freight, and the Regional Economy, Phase I,*
Co-PI (PI: Jose Holguin-Veras)
Time of award: September 1, 2007 – December 31, 2008 (16 months),
Funds: RPI total funds $260,000
Agency Sponsor: New York State Department of Transportation

My responsibility: 50% of the contract.

3. *Center for Intermodal Freight Security and Mobility,*
   Co-PI (PI: Jose Holguin-Veras),
   Time of award: September 2007 – August 2008 (1 year),
   Funds: RPI total funds $170,000
   Agency Sponsor: U.S. Department of Transportation.
   My responsibility: 50% of the contract.

4. *Safety treatment of urban arterial in New Jersey,*
   Co-PI,
   Time of award: January 1, 2008 – August 31, 2008,
   Funds: Total Funds: $20,000,
   Agency Sponsor: NJDOT (Lead: Rutgers University).
   My responsibility: 100% of the contract.

5. *Evaluating Ramp Metering Strategies,*
   Co-PI,
   Time of award: January 1, 2008 – December 31, 2008 (1 year;),
   Funds: Total Funds: $15,000,
   Agency Sponsor: NJDOT (Lead: Rutgers University).
   My responsibility: 100% of the contract.

6. *Identification and Modeling of Next Generation Travel Guidance Systems*
   Sole PI,
   Time of award: October 1, 2007 – September 30, 2008 (1 year),
   Funds: Total Project Costs: $34,000
   Program: September 11 Memorial Program, NYMTC/UTRC,
   My responsibility: 100% of the contract.

7. *A Comprehensive Survey of Emerging Technology in New York Metropolitan Area,*
   PI (Co-PI: Jose Holguin-Veras),
   Time of award: April 26, 2007 – April 25, 2008 (1 year),
   Funds: RPI total funds $189,000
   Agency Sponsor: New York Metropolitan Transportation Council.
   My responsibility: 90% of the contract.

8. *A Decision Support Tool to Assess the Importance of Transportation Facilities,*
   PI (Co-PI: Didier Valdes),
   Time of award: January 1, 2007 – December 31, 2007 (1 year),
   Funds: RPI total funds $50,000
   Agency Sponsor: University Transportation Research Center, Region 1.
   My responsibility: 100% of the contract.

9. *Contending with Materiel Convergence: Optimal Control, Optimization of Supply Chains,*
   Co-PI (Other PI's: Jose Holguin-Veras, Tricia Wachtendorf, Wayne Bequette and Didier

Valdes),
Time of award: January 1, 2007 – December 31, 2009 (3 years),
Funds: Total Funds: $750,000; RPI total funds $500,000
Agency Sponsor: Human and Social Dynamics (HSD) Program at National Science Foundation.
My responsibility: 20% of the contract.

10. *Characterization of Supply Chains in the Aftermath of an extreme event,*
Co-PI (Other PI's: Jose Holguin-Veras, Tricia Wachtendorf),
Time of award: January 1, 2006 – July, 2007 (1 year; NCE),
Funds: Total Funds: $88,943; RPI total funds $63,943
Agency Sponsor: SGER Program at the National Science Foundation.
My responsibility: 45% of the contract.

11. *Integrated Supply Demand Models for Transportation Systems Management,*
Sole PI,
Time of award: January 1, 2007 – December 31, 2007 (1 year;),
Funds: Total Funds: $5,000,
Agency Sponsor: Selected for the Emerging Scholars Program at UTRC.
My responsibility: 100% of the contract.

- **at UT**

1. *Application of Credit-Based Congestion Pricing in Texas: Operational considerations and impacts*, for Texas Dept. of Transportation (TxDOT) (August 2003 - July 2005)
2. *The Role of Toll Projects in Enhancing Texas Transportation*, for TxDOT (August 2003 - July 2005)
3. *Robust design and evaluation of Transportation Networks with Equilibrium under demand uncertainty*, for Southwest University Transportation Center (SWUTC) (August 2003 - April 2005)
4. *Retrofit of Dynamic Traffic Models*, for Mid America Earthquake(MAE) Center (November 2003 - July 2005)
5. *Accounting for Information and Recourse in the Robust Design and Optimization of Stochastic Transportation Networks*, National Science Foundation (NSF) CAREER Award (June 2004 - July 2005)

- **at UIUC**

1. *Development of Mathematical and Simulation Models for Transportation Network Systems Experiencing Information Provision*, for the UIUC Research Board, (January 2002 - July 2003)
2. *Multiple Stage Optimization of Stochastic Dynamic Transportation Networks*, for the National Science Foundation (NSF), (March 2002 - January 2004)
3. *Regional Traffic Simulation with Traffic Signal Priority*, for the Chicago Transportation Regional Authority, (February 2002 - March 2003)

- **at IIT, Madras**

    1. *Feasibility Study of Planning and Design of the New International Airport at Bangalore*, for Hochtief, Chennai, August 2000 - February 2001.

Invited Presentations - Keynotes, Plenary Talks, Invited Seminars [1]

1. Stochastic Dynamic Transportation Network Modeling: Key Challenges and Research Opportunities. Indian Institute of Technology, Mumbai, India, March 4, 2004.

2. Robust Transportation Network Analysis: Formulations, solution methodologies and implementations. 84th Transportation Research Board Conference Doctoral Seminar. January 12, 2005.

3. Accounting for Uncertainty, Robustness and Online Information in Transportation Networks. Rensselaer Polytechnic Institute. March 30, 2005.

4. Accounting for Uncertainty, Robustness and Online Information in Transportation Networks. University of Illinois at Urbana Champaign. April 6, 2005.

5. Online Transportation Network Management: Algorithms and Solution Techniques. Decision Science and Engineering Systems seminar at Rensselaer Polytechnic Institute, October 18, 2005.

6. Opportunities in Transportation Engineering Research. University of Puerto Rico Mayaguez in both the Civil engineering and the Industrial Engineering departments, May 5, 6, 2006.

7. Non-equilibrium in dynamic traffic networks: New Results from an experimental network game. Indian Institute of Technology, Mumbai, January 15, 2007.

8. Stochastic and Dynamic Transportation Networks: Overview and Current Research Challenges. Transportation Seminar Series, University of Vermont National Transportation Center, Burlington, VT. February 23, 2007.

9. Intelligent Transportation Systems for Transportation Demand Management. New York Metropolitan Transportation Council (NYMTC), New York City. April 3, 2007.

10. Modeling the Critical Goods Supply Chain in Hurricane Katrina: An integrated Engineering-Social Science Perspective. Workshop in National Science Foundation (NSF) Natural and Man-made Hazards Conference in Kampala, Uganda. July 21, 2007.

11. Dynamic Traffic Assignment: Overview, Functionalities, Model and Algorithms for Transportation Planning. A 3 hour Invited Talk at NY Best Practice Model (BPM) Users Meeting, New York City. August 27, 2007.

12. Connectivity of Vehicular Ad Hoc Networks: Analytical Characterization. IIT Bombay, India. December 17, 2007.

13. Supply Chain Issues in the Hurricane Katrina Debacle: Insights and Lessons Learned. Tata Institute of Social Sciences (TISS) Bombay, India. December 22, 2007.

14. Modeling Vulnerability in Critical Infrastructure Protection. Invited Talk in Tutorial Session on Critical Infrastructure Protection, Transportation Research Board Conference, National Research Council. Washington D.C. January 15, 2008.

[1] In addition to these invited presentations, Dr. Ukkusuri and his students have given more than 350 presentations at conferences, symposiums, university, industry and agency meetings.

15. Convergence of Real Time Information, Systems Management and Traffic Operations. CIRCA 08 NanoTech Center, SUNY Albany. May 20, 2008.

16. Connectivity Issues in Vehicular Ad Hoc Networks: Analytical Characterization. Laboratory of Transportation Economics, Lyon, France. June 16, 2008.

17. An emerging three-tier architecture for prescriptive traveler systems. Indian Institute of Technology, Bombay, India. August 13, 2008.

18. Issues related to transportation modeling in Emergency Logistics. A 3hr invited workshop speaker for the M.S. students at Tata Institute of Social Sciences, Bombay, India as part of the Logistics Management in Disaster Situations course. August 21, 2008.

19. Contending with Emergency Logistics Issues in Hurricane Katrina: An integrated Engineering-Social Science Perspective. Tata Institute of Social Sciences, Bombay, India. August 22, 2008.

20. Modeling Uncertainty in Network Evacuation Problems. National Institute of Technology, Warangal, India. January 3, 2009.

21. Issues related to transportation modeling in Hurricane Evacuation: An Interdisciplinary Approach. Purdue University. May 8, 2009.

22. Understanding the Logistics Issues in Humanitarian Supply Chains. Business School at Purdue University, Calumet. October 11, 2009.

23. Transportation Networks, Communication and Computation: An Integrative Perspective. Midwest University-Industry Summit. Purdue University. March 31, 2010.

24. Complementarity Formulations for the Dynamic Traffic Equilibrium Problem. Invited talk at the NSF workshop on Route Guidance and Coordinated Traffic Control. Rutgers University. June 8, 2010.

25. Emergency Logistics Issues in Hurricane Evacuation. Disasters Roundtable at Tata Institute of Social Science. Mumbai, India. December 14, 2010.

26. Simulation of the Urban Off-Peak Delivery Strategies: Results from a recent pilot test in New York City. TPMDC conference at Indian Institute of Technology, Bombay, India. December 16, 2010.

27. On the Price of Anarchy in Dynamic Equilibrium Problems. University of Illinois, Chicago Computational Transportation Systems IGERT Program. April 15, 2011.

28. Hurricane Evacuation Modeling from an Interdisciplinary Perspective. Technical University of Delft, Netherlands. July 13, 2011.

29. Behavioral models for hurricane evacuation: A need for data collection in emerging countries. Indian Institute of Technology, Hyderabad, India. August 8, 2011.

30. Network Resilience in Disasters: An Interdisciplinary, International Perspective. Global Policy Research Institute, Purdue University. September 20, 2011.

31. Modeling Hurricane Evacuation Integrated with Enriched Household Level Behavior: Evidence from Hurricane Ivan and Katrina. King Mongkut University, Bangkok, Thailand. December 13, 2011.

32. Integrating Household level behavior in an Agent-based modeling framework. I Behavior in Networks (BiNs) workshop. University of Hong Kong. December 16, 2011.

33. Emerging Trends in Modeling Sustainability Issues in Transportation Systems. *Plenary Talk* at the Hong Kong Transportation Science Conference. Hong Kong, December 19, 2011.

34. Hurricane Evacuation Modeling from an Integrative Perspective: Current Approaches and Challenges. University of South Florida, Tampa. May 3, 2012.

35. The use of Very Large Scale Social Media Data for ITS Applications. *Plenary Talk* at the Beijing Jiaotong ITS Workshop. Beijing, China, May 25, 2012.

36. The use of GPS data for transportation applications: Emerging Ideas from two recent projects. Invited talk at Wuhan University, Wuhan, China. May 28, 2012.

37. Integrative Sustainability Tools for Transportation Modeling. University of New South Wales Civil Engineering Department, Sydney, Australia, September 20, 2012

38. The Use of Very Large Scale Geo Location Data for Activity Travel Analysis. Department of Computer Science, University of New South Wales, Sydney, Australia, October 4, 2012.

39. The Large Scale Analysis of NYC Taxi Cab Data for Link Travel Time Estimation. Australia Information and Communications Technology Research Center for Excellence (NICTA), Sydney, Australia, October 9, 2012.

40. Warning Information Diffusion in a Social Network for Emergency Evacuation. Emergency Preparedness Conference, MIDAS Center for Excellence, University of Pittsburgh, October 22, 2012.

41. OR in Transportation and Transportation in OR : Interdisciplinary Problems in Transportation Research. INFORMS Purdue Chapter Guest Lecture, Purdue University, November 7, 2012.

42. Hurricane Evacuation Modeling from an Integrative Perspective. Department of Civil Engineering Distinguished Seminar Series, University of Wisconsin Milwaukee, Milwaukee, November 30, 2012.

43. Emerging Issues in Interdisciplinary Evacuation Modeling Research. Masterclass at Technical University, Delft, Netherlands. February 19, 2013.

44. The Use of Very Large Scale Geo Location Data for Intelligent Transportation Systems Applications. Bruce Podwal Distinguished Lecture at City College of New York, New York City, March 12, 2013.

45. Geo Location Data for Transportation Planning and Operations: Opportunities and Recent Results. ITS Happening! Seminar Series at Indian Institute of Technology, Madras, July 30, 2013.

46. Big Data for Transportation Systems Analysis: Applications to Urban Systems Modeling. DIMACS Workshop on Sustainable Human Environments, Rutgers, April 24, 2014.

47. Data Analytics for Urban Innovations: State of the Art. Tongji University, Shanghai, China, May 29, 2014.

48. Integrative, Interdisciplinary Research Issues in Evacuation Modeling. *Keynote Talk* at the Minisymposium on Evacuation Modeling, Kos Island, Greece, June 6, 2014.

49. Dynamic Network Equilibrium in Transportation Problems: Recent Advances and Open Questions. *Semi-Plenary Talk* at the International Conference on Engineering and Applied Sciences Optimization (OPTI 2014), Kos Island, Greece, June 7, 2014.

50. A coupled hierarchical model integrating household level behavior with large scale city wide model for urban evacuations. Fulbright Catedra 2014 at Uninorte, Colombia, October 1, 2014.

51. (Issues to consider) in the use of large scale geo-location data for smart infrastructure solutions. VACCINE Annual Meeting, Purdue University, October 16, 2014.

52. Keynote Talk: Convergence of Big Data and Networks for Sustainable Cities. Second International Conference on Urban Sustainability. Hong Kong. Jan 4, 2015.

53. Big Data Transportation Analytics: Summary of Research Questions, ITE Seminar, Purdue University, March 28, 2015.

54. Big Data Transportation Analytics: Recent Explorations and Future Opportunities, Tongji University, April 11, 2015.

55. Big Data Transportation Analytics: Recent Explorations and Future Opportunities, Southeast University, April 14, 2015.

56. Modeling Flow, Dynamics and Strategic Interaction in Coupled Transportation Networks, International Symposium on Water, Feedbacks and Complexity, Seoul, June 29, 2015.

57. Tutorial on "Introduction to Complex Networks", Korea University, Seoul, July 1, 2015.

58. Big Data Transportation Analytics: An Opportunity or a Passing Trend?, University of Seoul, July 3, 2015.

59. Data Science for Taxi Markets, Lyft, July 18, 2015.

60. Inequalities in Coupled Complex Networks: Some examples using real world data, Environmental and Ecological Science (EES) Colloquium, September 21, 2015.

61. Data Science for Smart Transportation Solutions, Southeast University, Nanjing, China, October 23, 2015.

62. A vision for Smart Mobility and Intelligent Transportation Systems in the era of Big Data, Invited by the Ministry of Transportation, Government of Vietnam, Hanoi, November 26, 2015.

63. Overview of Transportation Research at Purdue University, Hanoi Architectural University, Hanoi, November 26, 2015.

64. Overview of Transportation Research at Purdue University, University of Transportation and Communication, Hanoi, November 27, 2015.

65. Interplay of structure and function in the failure of complex road networks, ITS Seminar, UC Berkeley, April 1, 2016.

66. Connected Travelers: A model for dynamic speed limit accounting for mobility and sustainability goals, Zhejiang University, China, April 24, 2016.

67. Big Data in Transportation Modeling: Emerging Ideas and a summary of recent research, Zhejiang University, China, April 25, 2016.

68. Big Data Research in Transportation Planning and Operations, Shanghai Maritime Transportation University, Shanghai, China, May 4, 2016.

69. Smart Mobility Solutions for Urban Transportation: Convergence of Big Data, Ride Sharing and Autonomous Vehicles, Tsinghua University, July 11, 2016.

70. Data Science as a panacea to Urban Mobility Challenges: Is it here to stay?, BD-Smart International workshop, Shanghai, July 17, 2016.

71. Smart Mobility Solutions for Urban Transportation: Convergence of Big Data, Connected Technologies and Shared Mobility, Big Data Institute Symposium,Tsinghua University, October 28, 2016.

72. Convergence of Smarter mobility technologies, network models and big data, Smart Transportation Technologies Symposium, NYU-AD, Abu Dhabi, November 20-21, 2016.

73. High Performance Computing Models for Integrative Behaviorally Enriched Simulation Models in Disaster Management, International Symposium on Disaster Management, Kobe, Japan, December 6-10, 2016.

74. Smart Mobility Solutions in a Connected and Autonomous Environment, Transportation Seminar, Tongji University, Shanghai, March 31, 2017.

75. Recent Advances in Smart and Connected Mobility Systems, Invited Seminar, School of Transportation Engineering, ChangAn University, April 10, 2017.

76. Convergence of Networks and Smart Mobility technologies: Recent Advances, Invited Seminar, State University of New York Buffalo, May 2, 2017.

77. Resilience of Cities as Coupled Systems. Invited Seminar, School of Management, Beihang University, June 29, 2017.

78. Network Modeling and Big Data for Smart Transportation Analytics. Distinguished Seminar, School of Automative Engineering, ChangAn University, July 5, 2017.

79. Social Media Data Analytics for Disasters. Invited Seminar, Workshop on Social Media Analytics and Decision Support Systems, San Diego State University, August 15, 2017.

80. Implications of Big Data Analytics for Transportation Planning. Invited Seminar, Universidad Nacional, Medellin, September 12, 2017.

81. Mobility on Demand Services for Megacities. *Keynote* at the 3rd International Forum on Transport Big Data Sharing and Collaboration Conference, Shenzhen, China, Nov 17, 2017.

82. Big Data Analytics for Smarter Transportation Systems Planning. Invited Seminar, Hefei University of Technology, Hefei, China, Nov 20, 2017.

83. Convergence of Networks, Mobility on Demand Services and Smarter Transportation Technologies. *Keynote* at the 2018 ITS workshop at 9th International Conference on Communication Systems and Networks (COMSNETS), Bengaluru, India, Jan 4, 2018.

84. Crowdshipping Models as a sustainable last mile delivery alternative. Invited Seminar, Indian School of Business, Hyderabad, India, January 22, 2018.

85. Emerging Trends in Transportation Research. Invited lecture to undergraduate students, Indian Institute of Technology, Tirupati, India, February 2, 2018.

86. Networks, Smart Mobility and Autonomous Transportation: Recent Advances. C2SMART Distinguished Seminar Series, New York University, New York, February 23, 2018.

87. Convergent Transportation Research in an Era of Accelerated Technological Change, Texas A&M Invited Seminar, College Station, May 23, 2018.

88. Recent Advances in Big Data Transportation Networks, Invited Seminar at Hefei University of Technology, June 16, 2018.

89. Recent Advances in Connected and Autonomous Vehicle Modeling, Invited Seminar at Southeast University, June 24, 2018.

90. How will the data science revolution impact transportation modeling?, Tsinghua University Invited Seminar, July 4, 2018.

91. Resilience and Recovery of Complex Road Networks, *Keynote* at 10th International Computational Transportation Science Conference, Beijing, July 10, 2018.

92. Impacts on Emerging AI based technologies in Smart Mobility, *Keynote* in the School of Automobile Engineering at Chang'An University, Xian, November 19, 2018.

93. Addressing uncertainty and bias in forecasting demand for large scale infrastructure projects, *Keynote* at the International Conference on Transportation Projects: Conception to Execution at IIT Roorkee, January 8, 2019.

94. Resilience Modeling in Disasters: Applications to Infrastructure Projects, Invited talk at the World Bank GIS group, January 14, 2019.

95. Resilience Modeling in Cities: In Search of Universal Patterns, *Distinguished Department Lecture*, Department of Civil, Environmental and Architectural Engineering, University of Texas at Austin, February 25, 2019.

96. On the Inaccuracy of long term demand forecasts, ITE Seminar, Purdue University, March 5, 2019.

97. Advances in Data Driven Modeling of Urban Resilience: Theory and Applications, Remote presentation to the Asian Development Bank Institute (ADBI) Dean and his group, Tokyo, Japan, March 25, 2019.

98. Modeling the failure and recovery considering structure-function interactions in complex road networks, Invited Presentation, Workshop in honor of Professor Andrea Rinaldo (Neil Armstrong Distinguished Visiting Fellow), April 2, 2019.

99. Innovations in Smart Mobility Research in the Era of Accelerated Technological Change, *Keynote* SMART International Conference, University of Central Florida, Orlando, May 1, 2019.

100. Amplifying the Impact of Policy Research in a Convergent Landscape, Purdue Policy Research Institute (PPRI) Director Finalist Presentation, Discovery Park, Purdue University, May 3, 2019.

101. Recent Advances in Data Science applications in Smart Transportation, Distinguished Lecture, Chang'An University, Xian, China, May 14, 2019.

102. Applications of Data Science techniques for solving urban congestion: What, why and how?, Invited Lecture, Big Data Transportation Center, Shaanxi Province, Xian, China, May 15, 2019.

103. Simulation Models for Estimating the Impact of Autonomous Vehicles, Invited Seminar, Tsinghua University, China, May 21, 2019.

104. Resilience Modeling in Cities: Economic Impact Analysis for Infrastructure Projects using Data Analytics, Invited talk by Asian Development Bank Institute (ADBI) Special Session on High Speed Rail for India at 15th World Congress in Transportation Research (WCTR), Mumbai, May 30, 2019.

105. Innovations in Mobility as a Service (MaaS) research in the Era of Connected and Autonomous Transportation Systems. Distinguished Seminar at Monash University, Melbourne, Australia. June 28, 2019.

106. Modeling the competition in emerging taxi markets: Current research advances and open questions. *Keynote* in 19th COTA International Conference of Transportation Professionals (CICTP2019), Nanjing, China, July 7, 2019.

107. Advances in geo-location data based mobility prediction. *Keynote* in 3rd International PredictGIS workshop at 28th ACM SIGSPATIAL conference, Chicago, November 7, 2019.

108. In search of universal patterns of human mobility. *Keynote* in Robert Bosch Center for Data Science and AI, Google-IITM Workshop on Smart Mobility, Indian Institute of Technology, Madras, India, December 16, 2019.

109. Advances in Smart Mobility in an Era of Accelerated Technological change. *Keynote* at the 6th International Conference of Transportation Research Group of India (CTRG), Bhopal, India, December 19, 2019.

110. Using Mobility Analytics to understand the Recovery of Cities after Disasters and Pandemics. Distinguished Speaker Series at the Asian Development Bank Institute (Virtual Seminar), Tokyo, Japan, June 5, 2020.

111. Mobility as a Service (MaaS): Do these technologies make cities smarter? Distinguished Speaker Series at the Asian Development Bank Institute (Virtual Seminar), Tokyo, Japan, July 3, 2020.

112. The relationship between mobility restrictions and COVID-19 infection rates: Evidence from US and Japan. Invited seminar at the Bridging Transportation Research Conference (Virtual Seminar), August 13, 2020.

113. The role of vehicle trajectory data for traffic operations: Evidence from Uber. Invited seminar at University of California, Berkeley (Virtual Seminar), November 19, 2020.

114. Do Mobility as a Service Systems Make Cities Smarter? – Evidence from Large Scale Trajectory Data . C2M2 Distinguished Speaker Series, Clemson University (Virtual Seminar), March 12, 2021.

115. The use of large scale mobility data for transportation planning, congestion analysis and investment analysis: Prospects for Nouakchott. Invited Seminar for the Ministry of Transportation, Mauritania (Virtual Seminar), March 9, 2021.

116. The use of large scale mobility data for transportation planning, congestion analysis and investment analysis: Prospects for Dakar, Senegal. Invited Seminar for the Ministry of Transportation, Mauritania (Virtual Seminar), March 26, 2021.

117. Geo-location data for Computational Mobility: Operational metrics and Inequalities. Invited talk at the Google workshop on Markets, Mobility and Mind (Virtual Seminar), May 19, 2021.

118. What is next with big data for transport?. Invited talk at the Infrastructure Panel in Data Analytics at World Bank (Virtual Seminar), May 26, 2021.

119. The use of geo-location data for transport analysis and climate change impacts in cities. Invited talk at Quadrant internal meeting (Virtual), June 21, 2021.

120. AI Innovations in smart transportation for sustainable and inclusive cities. Inaugural keynote speaker at the School of Artificial Intelligence and Data Science, IIT Jodhpur, June 23, 2021.

121. The role of big data analytics for sustainable transportation modeling. Keynote at the 8th International conference on Transportation Systems Engineering and Management, NIT Calicut, August 26, 2021.

122. Mobility Analytics allows the understanding of recovery cities after disasters and pandemics. Weston Roundtable Lecture at the Nelson Institute of Environmental Studies, University of Wisconsin Madison, November 4, 2021.

123. Big Data Analytics to Advance Public Transport Modeling and Policy. Keynote at the 9th International Public Transport Forum, Organized by the Ministry of Land, Infrastructure and Transport (MOLIT), Republic of Korea, November 22, 2021.

124. Data Driven Transport and Resilient Analytics in Chennai. Invited Presentation by The World Bank at the Chennai Metropolitan Development Authority (CMDA), Chennai, India, March 31, 2022.

125. Data Driven Models for Connected Mobility. Invited Presentation at the 1st Symposium of Connected Mobility, Indian Institute of Technology, Madras, Chennai, India, March 31, 2022.

126. Advances in Connected and Automated Mobility: An Indian Context, Keynote at the InTransSE conference organized by the Ministry of Electronics and Information Technology, Government of India, New Delhi April 8, 2022.

127. Nexus of Networks, AI and Data Driven Models in Transport: Recent Advances. Invited Seminar at Indian Institute of Science, Bangalore, India, April 6, 2022.

128. Location based Mobility Data for Transit Analysis: A case study of Delhi. Talk at the World Bank India, July 5, 2022

129. Advances in Connected and Autonomous Transportation Network Modeling. Invited talk to the Vellore Institute of Technology ASCE Chapter. September 12, 2022

130. Harnessing the power of AI based analytics for Transit Oriented Developement. Keynote at the 40th Anniversary Conference of the Korean Society of Transportation (KST), Seoul. September 29, 2022.

131. Accelerating Energy Efficiency at Transportation Hubs. Smart Cities Seminar at the University of Central Florida, Orlando. November 23, 2022.

132. AI based Data Analytics for understanding the recovery of cities after shocks: Recent Advances. Invited seminar in the Center for Spatial Information Science, University of Tokyo. December 14, 2022.

133. Harnessing Data Analytics for Transit Planning and Operations. Invited Seminar at Kyoto University. December 20, 2022.

134. Resilience of Interdependent Socio-technical systems for accelerating the recovery post-disaster. Workshop at Transportation Research Board. January 8, 2023

135. AI based data analytics for accelerating the recovery of cities after shocks. Invited seminar at One Concern, a start up focused on disaster modeling. March 8, 2023.

136. Advancing Energy Efficient Mobility Analytics in Transportation Hubs. Keynote at the Swiss Transportation Conference. May 9, 2023.

137. AI based mobility analytics for interdependent transportation networks. Seminar at TU Dresden. May 20, 2023.

138. Research agenda in Transporation Cybersecurity. Invitation presentation at the industry forum in CERIAS. June 10, 2023.

139. Advancing Energy Efficient Mobility Analytics in Transportation Hubs. Invited Seminar at Gustav-Eiffel University. July 28, 2023.

Teaching Ability and Effectiveness

Course Number and Title	Semester/ Year	No of Students	Course/Instructor Ratings (out of 5)
HONR 399/CE 497/COM 497: Disaster Resilience and Society	Fall 18, 19	8, 14	4.5/4.1, 4.7/4.9
CE 597: Data Science for Smart Cities (Online) and On campus	Fall 18, 20	24 (7), 15	4.4 (3.6)/4.6 (3.6), 4.7/4.5
CE 597: Network Models for Connected and Autonomous Vehicles	Fall 19	9	4.8/4.9
CE 597: The Science and Business of Logistics Systems (Online and On campus)	Fall 15, 17, 20	12, 9, 5	4.4/4.5, 4.3/4.0, 5.0/5.0
CE 398: Introduction to Civil Engineering Systems Design	Spring 10, 11, 12, 13, 14, 15	119, 112, 128, 105, 69, 73	3.2/3.7, 3.0/3.2, 3.2/3.4, 4.0/4.0, 3.8/3.9
CE 497: Australia Study Abroad: Sustainability and its Impact in Civil Engineering	Summer 13	26	5.0/4.6
CE 597: Dynamic Transportation Models	Spring 2011, 2013	8, 7	4.5/4.5, 4.4/4.4.
CE 597: Freight Transportation and Commodity Flows	Fall 10	7	4.1/4.6
CE 661: Algorithms in Transportation	Spring 10, 12, 14, Fall 2017	6, 8, 5, 8	4.7/4.9, 4.5/4.9, 4.5/4.9, 4.8/4.5
CIVL 2330: Introduction to Civil Engineering	Spring 09	49	3.9/4.1
CIVL 2030: Introduction to Transportation Engineering	Fall 06, 07, 08	79, 79, 78	3.5/3.8, 3.8/3.7, 3.8/3.8
CIVL 6270: Traffic Control Systems and Operations	Spring 07	13	3.9/3.9
CIVL 6991:Dynamic Transportation Modeling	Spring 2006	8	5.0/4.8
CIVL 6991: Critical Issues in Transportation Systems	Spring 08	7	4.1/4.0
CIVL 6963: Transportation Algorithms	Spring 09	11	4.2/4.4

- **Highlights of New Teaching Initiatives**

1. IMPACT Course Development: With funding from Purdue IMPACT, Dr. Ukkusuri redesigned the introductory "CE 398: Civil Engineering Systems Design" course with each module using a different teaching philosophy. He used innovative technology such as Hotseat, online videos and a tablet PC to gauge student sentiment for various modules throughout the course for further improvement.
2. Honors Course: Dr. Ukkusuri led the development of a new undergraduate honors course on "Disaster Resilience and Society" an interdisciplinary course that was co-taught by

two instructors - Dr. Ukkusuri in Engineering and Dr. Seungyoon Lee in Communication (Liberal Arts). The course received excellent reviews from students and will be offered again in Fall 2019.

3. Other new courses and Online courses: Based on his research, Dr. Ukkusuri developed a new course called "Data Science for Smart Cities" that was offered for the first time in Fall 2018. The graduate course had a high enrollment and was offered as both an online and on-campus course. The course received positive reviews from students and will be offered once every two years. Dr. Ukkusuri is currently developing a new course "Network Models for Connected and Autonomous Transportation" to be offered in Fall 2019. Dr. Ukkusuri has developed two important courses at Purdue including the CE 597: Dynamic Transportation Network Equilibrium (graduate course, taught four times from Spring 2011) and Science and Business of Logistics Systems (CE 597 undergraduate/graduate-level course, taught four times). The logistics course was offered both as an on-campus and online course.
4. Study Abroad Courses to Australia and Europe: Dr. Ukkusuri led a study abroad course to Australia with 26 undergraduate and graduate students to visit civil engineering projects in Sydney, Gladstone and Perth. This course received 5.0/5.0 from the students and was unanimously hailed as one the best experiences of the students who took this course. Dr. Ukkusuri was a Senior Research Fellow at the University of New South Wales in 2012 and based on these contacts he was able to organize the visits to various research centers and project sites. Dr. Ukkusuri also led a study abroad course on Smart Mobility in Europe to Czech Republic and Germany based on collaborations with university and industry partners. Dr. Ukkusuri integrates his research activities in his teaching wherever appropriate to maximize the impact of the educational experience of students.
5. Short Course on Critical Topics: Dr. Ukkusuri had developed short courses in the areas of Intelligent Transportation Systems, Big Data Transportation Modeling and Transportation Network Models. These courses were offered in various universities in India (e.g. IIT Mumbai), China (Tsinghua University) and Colombia (Uninorte) and transportation agencies (e.g. NYMTC, INDOT).
6. Former PhD and Post-Doc Students in Academia: Dr. Ukkusuri is passionate about training and mentoring his graduate students to achieve their true potential whichever path they choose. His PhD students are faculty in various universities in the US (University of Florida, Kansas State University, University of Central Florida, Florida Institute of Technology, Florida International University etc), India (IIT Mumbai, IIT Chennai, IIT Roorkee in Electrical and Computer Science), Singapore (Nanyang Technical University), China (Southeast University) and in top technology companies and leadership positions in the government.
7. Online MS Program/edX course development: Dr. Ukkusuri is actively engaged with the new online MS program in the Lyles School of Civil Engineering. He has developed a new course on 'Data Science for Smart Cities' in Fall 2020 for the Civil Online MS program. This course was offered as part of the online MS program and edX in Spring 2021. He has developed the Logistics systems course in Spring 2021 which was offered in the online MS program in Fall 2021. He developed the Network Models for Connected and Autonomous Vehicles online course in Fall 2021 which is offered in the online MS program in Spring 2022.

8. Professional IDE program in Indianapolis: Dr. Ukkusuri led the development of a new professional MS program in Indianapolis on "Smart Cities and Urban Informatics". With the involvement of faculty from departments across campus and support from the School of Civil Engineering leadership and the College of Engineering, Prof. Ukkusuri organized the proposal, curriculum and meetings with various stakeholders to develop the Smart Cities program in Indianapolis. The program is expected to kickoff in fall 2024.

- **Other Teaching Related Activities**

1. Industrial Design Fall 2000
   Teaching assistant for "Industrial Design (ID 110)",
2. Short term course on Sustainability of Urban Transportation Systems November 2000 - January 2001
   Prepared the lecture notes and presentations for Prof. Thamizh V. Arasan at IIT, Madras.
3. Transportation Network Analysis Fall 2003
   Teaching assistant for "Transportation Network Analysis (CE 397TNA)"
4. ExCEEd Teaching Workshop August 2004
   Participated in the ASCE ExCEEd Teaching Workshop at Northeastern University, Boston.
5. Teaching Effectiveness Colloquium October 2004
   Nominated by Department of Civil Engineering chair, UT to attend the VI INFORMS Teaching Effectiveness Colloquium at Denver.
6. ASEE National Teaching Effectiveness Workshop (NETI-I) January 2014 Sponsored by the College of Engineering to participate in the NETI-I workshop to share teaching experience. Attended in New Orleans.
7. Short course on "Computational Transportation Science" May 2014
   Department of Systems Engineering, Uninorte, Colombia
8. Short course on "Dynamic Traffic Assignment" October 2017
   Metropolitan Transportation Agency, Aburra Region, Medellin, Colombia
9. Short course on "Transportation Network Analysis" May 2014, June 2016
   Department of Civil Engineering, Tsinghua University, Beijing,China
10. Short course on "Data Mining in Intelligent Transportation Systems" October 2015
    School of Transportation Engineering, Southeast University, Nanjing, China

Doctoral Students Supervised

1. Dr. Gopal Patil, December 2007. Professor, Indian Institute of Technology, Bombay, India
2. Dr. Lili Du, August 2008. Associate Professor, University of Florida
3. Dr. Gitakrishnan Ramadurai, August 2009. Professor, Indian Institute of Technology, Madras, India
4. Dr. Bo Zhang, August 2011(co-advisor: Victor Chan). Operations Research Analyst, American Airlines
5. Dr. Samiul Hasan, August 2013. Associate Professor, University of Central Florida
6. Dr. Kien Doan, August 2013. Deputy Director, Urban Civil Works Construction Management Authority, Ho Chi Minh City, Vietnam
7. Dr. Abdul Aziz, August 2014. Assistant Professor, Kansas State University
8. Dr. Rodrigo Mesa-Arango, May 2015. Assistant Professor, Florida Institute of Technology
9. Dr. Feng Zhu, August 2016. Assistant Professor, Nanyang Technological University (NTU), Singapore
10. Dr. Arif Mohaimin Sadri, December 2016. Assistant Professor, University of Oklahoma
11. Dr. Xianyuan Zhan, August 2017. Research Assistant Professor, Artificial Intelligence Research, Tsinghua University
12. Dr. Wenbo Zhang, December 2018. Assistant Professor, Southeast University
13. Dr. Xinwu Qian, December 2018. Assistant Professor, Rice University
14. Dr. Tho Le, May 2019. Assistant Professor, Department of Transportation Technology, Purdue University
15. Dr. Hemant Gehlot (co-advisor: Shreyas Sundaram), Spring 2021. Assistant Professor, Indian Institute of Technology (IIT), Kanpur, India
16. Dr. Takahiro Yabe, Summer 2021. Assistant Professor, New York University.
17. Jiawei Xue, Summer 2024. Senior AI Researcher, Alibaba.
18. Zengxiang Lei, December 2024.
19. Rajat Verma, Summer 2024.
20. Xiaowei Chen, Summer 2024.
21. Sangung Park, Summer 2024.
22. Eunhan Ka, Fall 2020-present
23. Omar Faruq Hamim, Spring 2021-present

24. Shagun Mittal, Summer 2021-present
25. Mithun Debnath, Fall 2022-present
26. Ruichen Tan, Fall 2023-present
27. Shiveswarran Ratneswaran, Fall 2024-present
28. Hongli Li, Fall 2024-present

Visiting Faculty, Visiting Students and Post-Doctoral Research Associates

1. Dr. Tom Mathew, Professor, IIT Bombay, India, Summer 2006 and Summer 2008
2. Dr. Ivan Sarmiento, Department Head, Civil Engineering, Universidad Nacional Medellin, Colombia, Summer 2012
3. Dr. Ruimin Li, Associate Professor, Tsinghua University, China, December 2012
4. Dr. Pedro Wightman, Department Head, Systems Engineering, Uninorte, Colombia, December 2012 and Summer 2013
5. Dr. Shifeng Niu, Associate Professor, Chang'An University, China, March 2018-March 2019
6. Dr. Riduan Abid, Al Akhawayn University, Morocco, May-June 2018
7. Dr. Qin Xi, Associate Professor, Chang'An University, China, July 2019-July 2020
8. Dr. Lanshan Han, Post Doctoral Fellow, August 2010 - August 2011, Current Position: Director of Research and Development, Precima.
9. Dr. Dheeraj Kumar, Post Doctoral Fellow, May 2017-April 2019, Current Position: Assistant Professor, Department of Electrical and Communication Engineering, Indian Institute of Technology, Roorkee.
10. Dr. Xinwu Xian, Post Doctoral Fellow, January 2019- August 2020, Current Position: Assistant Professor, University of Alabama.
11. Dr. Tian Lei, Post Doctoral Fellow, April 2019-February 2020, Current Position: Assistant Professor, Shenzhen University of Science and Technology.
12. Dr. Surendra Reddy Kancharla, Post Doctoral Fellow, January 2021-August 2022
13. Dr. Sandro Reia, Post Doctoral Fellow, April 2021- May 2023
14. Dr. Washim Uddin Mondal, Post Doctoral Fellow, March 2021-present
15. Yuqin Wang, Tongji University, China, September 2015-April 2016
16. Xiqiong Chen, Changan University, China, March-September 2016
17. Fenfan Yan, Tongji University, China, September 2016 - August 2017
18. Yi Zhao, Southeast University, China, August 2016 - July 2017

19. Rui Chen, Tsinghua University, China, September 2016 - August 2017
20. Yayoe Li, China Science and Technology University, China, October 2016 - September 2017
21. Yunwen Chen, Shanghai Jiaotong University, China, October 2016-September 2017
22. William Albiero Valle, Universidad Nacional, Medellin, Colombia, December 2016 - March 2017
23. Chao Wang, Southeast University, China, July 2017-March 2018
24. Zhiyong Liu, Tsinghua University, China, August 2017 and November 2019-October 2020
25. Yunlong An, Tsinghua University, China, August - September 2017
26. Yilan Cui, Tsinghua University, China, September 2017-August 2018
27. Zhile Wang, Beijing Institute of Technology, China, October 2017-October 2018
28. Bao Jie, Southeast University, China, November 2017-November 2018
29. Yingjiu Pan, Southeast University, China, November 2017-November 2019
30. Abhishek Damera, Indian Institute of Technology, Madras, India, May 2018-July 2018
31. Zeren Tan, Tsinghua University, China, July - September 2018
32. Radar Lei, Southeast University, China, August 2018-July 2019
33. Lin Zhang, Southeast University, China, December 2018-November 2019
34. Yu Tu, Southeast University, China, November 2019-June 2020
35. Zhiyong Liu, Tsinghua University, China, June 2019-June 2020

M.S. Students with Thesis

- **Purdue University**

1. Binh Luong, August 2011
2. Xianyuan Zhan, December 2012
3. Sadri Arif Mohaimin, December 2012
4. Tawfiq Sarwar, May 2013
5. Xinwu Qian, May 2014
6. Pulkit Parikh, December 2015
7. Fasil Sagir, December 2019
8. Nishtha Mahajan, May 2020
9. Shagun Mittal, May 2021
10. Juan Esteban Suarez Lopez, December 2020

- **Rensselaer Polytechnic Institute**

    1. Xiaquan Liu, December 2009
    2. Kien Doan, December 2009
    3. Jhael Isa, December 2009
    4. Ashley Corker, May 2009
    5. Lili Du, December 2007
    6. Andrew Blaisdell, Summer 2007
    7. Courtney Sweeney, Summer 2007

Undergraduate Student Research

1. Matthew Chmura, Fall 2008
2. Yuo Chan, Summer/Fall 2008
3. Michael Bell, Fall 2007/Spring 2008
4. Steven Mercer, Spring 2008
5. Xavier Hairston-Khan, Fall 2007
6. Hope Gist, Fall 2007
7. Michael Yatauro (ECSE), Summer 2007
8. Andrew Blaisdell, Spring 2006
9. Michael Thomas, Spring 2006
10. Ben Bowman, Spring 2017-January 2019
11. Daniel Miller-Hooks, Fall 2019-present
12. Chengyuan Yang, May 2020-present

Professional Activities

- **Editorship of Journals:**

  1. Founding **co-Editor In Chief**, *ACM Journal of Autonomous Transportation*, July 2022 - Present.
  2. **Editor In Chief**, *Data Science for Transportation* (Springer Nature Publishers), August 2021 - Present.
  3. **Associate Editor**, *Transportmetrica Part B*, July 2012 - present.
  4. **Area Editor**, *Networks and Spatial Economics*, August 2008 - July 2022.
  5. **Associate Editor**, *Transportation Research Record*, March 2018 - May 2022.
  6. **Academic Editor**, *PLOS ONE*, November 2015 - August 2021.
  7. **Series Editor**, *Urban Mobility Networks Book Series*, Elsevier Publications, March 2017-2020.
  8. **Editor**, Overview Papers, *Transportation Research Part-C*, January 2008 - December 2011.
  9. Editorial Advisory Board, Transportation Research Part C, January 2013 - 2020.
  10. Editorial Advisory Board, Transportation Research Part B, January 2011 - December 2018.
  11. Guest Editor, *Computer Aided Civil and Infrastructure Engineering, Special Issue on Novel Computational Modeling of Connected and Automated Transportation Systems*, December 2018-August 2019 (co-edited with Xiaobo Qu, Chalmers University and Bart van Arem, TU Delft)
  12. Guest Editor, *IEEE Transactions of ITS, Special Issue on Exploiting Wireless Communication Technologies in Vehicular Transportation Networks*, July 2009 (co-edited with Yibing Wang, Monash University and Tricia Chigan, Michigan Technological University)
  13. Guest Editor, *Transportation Research Part C, Special Issue on Wireless Vehicular Networks*, June 2008 (co-edited with Umit Ozgunar, Ohio State University)
  14. Associate Editor, IEEE International Conference on Intelligent Transportation Systems (ITSC) Conference, 2008-2013

- **Chair of Conference/Workshop Committees, Advisory Boards:**

  1. Co-chair, 7th IEEE Workshop on Big Data in Transportation, IEEE Big Data Conference, Sorrento, Italy, December 16, 2023.
  2. Co-Chair, 5th IEEE Workshop on Big Data Analytics in Supply Chains and Transportation, Los Angeles, December 7, 2019.
  3. Co-Chair, 3rd ACM SIGSPATIAL International Workshop on Prediction of Human Mobility, Chicago, November, 5, 2019.
  4. Co-Chair, 4th IEEE Workshop on Big Data Analytics in Supply Chains and Transportation, Seattle, December 10, 2018.
  5. Co-Chair, International Workshop on Big Data Analytics for Smart Transportation (BD-SMART), Shanghai, China, July 16-17, 2016.

6. Chair, Purdue-IITM Workshop on Urban Systems Sustainability, Chennai, India, February 13, 2014.
7. Co-Chair, NSF Workshop on Complexity Science Applied to Coupled Infrastructure Systems, Martha's Vineyard, June 3-4, 2012.
8. Co-Convenor, 4th International Symposium of Dynamic Traffic Assignment, Martha's Vineyard, June 3-7, 2012.
9. Co-Chair, Network Resilience Conference from an Interdisciplinary Perspective, Purdue University, April 7, 2011.
10. Chair, Workshop on Emerging Technologies for Next Generation Transportation Systems, September 28, 2008.
11. Intelligent Transportation Systems SIG Vice-Chair (elected), INFORMS. 2007 - 2009.
12. Intelligent Transportation Systems SIG Chair (elected), INFORMS. 2009 - 2011.
13. Advisory Board, International Conference on Smart Tourism, Smart Cities and Enabling Technology, University of Central Florida, Rosen College of Hospitality Management, 2018-present
14. Member, Scientific Advisory Committee, International Symposium of Dynamic Traffic Assignment, 2012-present
15. Member, Scientific Committee, Mobility 2020: Traffic, Transportation, and Logistics in a Cyber-Connected World, 2017
16. Advisory Committee Member, Trends and Recent Advances in Civil Engineering, TRACE-2010, National Institute of Technology, Calicut, India, December 2010
17. Member, International Technical Committee, International Conference on Recent Issues and Solution Methodologies in Transportation Engineering and Planning: Sustainable Transport, RISTEP 2010, June 15-18, 2010
18. Member of the Technical Program Committee (TPC) of ACM SIGKDD 2022.
19. Member of the Technical Program Committee (TPC) of IEEE Vehicular Transportation Conference 2007 in Baltimore, MD.
20. Member of the Organizing Committee for Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC 08), December 3-6, 2008, IIT Bombay, Mumbai, India.
21. Member of the Technical Program Committee (TPC) of IEEE Vehicular Transportation Conference, Baltimore, MD, 2007
22. Member of the Technical Program Committee (TPC) of IEEE ITSC Conference, 2007-2013
23. Session Chair of various technical sessions at INFORMS Annual meetings and Transportation Research Board Annual Conference, 2005 to present.

- **Proposal, Promotion and Award Committees:**

1. Council of University Transportation Centers (CUTC) Award Panel, 2006-present
2. Committee Member, INFORMS Transportation Science and Logistics (TSL) PhD Dissertation Prize Selection Committee, 2012, 2013
3. Committee Member, Eric Pas Dissertation Prize, 2013

4. Award panel for the NYMTC September 11 Memorial Program Academic Initiative, March 2008
5. CONSOLIDER Program (Funding for large integrative projects of the order of 5 million Euros), Spanish Ministry of Science and Education (June/July 2008)
6. University of Vermont Transportation Center (March 2007)
7. Annual Proposal Review for NEXTRANS, Purdue University
8. US National Science Foundation Review Panels, 2006-Present (17 panels including CAREER panels in CMMI, CISE programs)
9. New England University Transportation Center
10. Portuguese Foundation for Science and Technology (FCT), Portuguese Research Council (2012, 2013)
11. CONNECT, California University Transportation Center, UC Berkeley - 2014
12. Marsden Fund, Royal Society of New Zealand, May 2012-Present
13. Research Grants Council, Hong Kong - 2008-present (annually around 7 proposals)
14. Qatar National Research Foundation, May 2012-Present
15. King Fahd University Research Proposals, Saudi Arabia, May 2012-Present
16. DOE ARPANET Program, Spring 2015
17. Australian Research Council, May 2015-Present (2-3 proposal annually)
18. United Arab Emirates University Proposal Review, Spring 2019 (1 proposal)
19. Reviewer of faculty promotion cases in the US, Middle East, Australia and Europe, May 2013-Present (11 cases)
20. Reviewer of PhD thesis from top Indian universities (IITs), January 2016-Present (2 thesis)
21. Expert witness for legal cases in transportation engineering and policy (2 cases)
22. Mentor to an underrepresented PhD student from the Bill Anderson fund, January 2019-present

- **Consulting Activities:**

1. New York University (NYU) Rudin Transportation Center: Organized a short course on Dynamic Traffic Assignment and Demand Forecasting to New York Metropolitan Transportation Council (NYMTC), Fall 2008.
2. New York University: Consulting on a big data analytics project, Fall 2011.
3. San Diego State University, Expert Advisor and Consultant on social media based data analytics for evacuation decision making project funded by NSF, March 2017-present.
4. DJ Case/Indiana State Department of Agriculture, Consultant to develop a transportation strategy to improve the competitiveness of the hardwood industry supply chain in Indiana, January-August 2018.
5. The Mike Cox Law Firm, Expert witness on the case: Michigan DOT vs Riverview Trenton Railroad company. A litigation involving a multi-billion dollar cross border crossing project dealing with uncertainty analysis, demand forecasting, tolling analysis and network modeling, April-August 2018.

6. New York University/Uber, Consultant on sustainability impacts of For Hire Vehicles (FHVs) in urban areas, January-May 2020.
7. The World Bank, Short-term consultant to develop open source knowledge products related to disaster mobility analytics, May-July 2020.
8. Asian Development Bank Institute (ADBI), Consultant to develop research products related to Smart Mobility, May-August 2020.

Department and University Service

- **Purdue University**

1. Member, Online Doctor of Engineering (DEng) Working Group, College of Engineering, January 2024-present
2. Member, Dean's Faculty Council on Innovation and Making, April 2019-2022.
3. Co-lead, Engineering Faculty Conversation (EFC) on Smart Cities, Infrastructure and Transportation, January 2019
4. Served on PhD and MS thesis committees of 34 students at Purdue (Civil Engineering, Mechanical Engineering and Industrial Engineering), RPI and TU Delft, Netherlands (2 PhD students)
5. Organizing committee, The 5th Midwest workshop on Control and Game Theory, April 30-May 1, 2016
6. Co-Lead, Sustainable Communities Cluster Hire (a University wide Initiative to hire seven faculty and lead research efforts in this interdisciplinary area) August 2012 - Present
7. Member, CE Primary Committee, January 2011 - Present
8. Mentor to multiple Assistant/Associate Professors at Purdue and other universities, January 2011 - Present
9. Chair, Study Abroad Committee, January 2013 - May 2016
10. Member, Civil Engineering Strategic Planning Committee, January 2013 - May 2014
11. Member, Global Engineering Program, August 2013-May 2016
12. Co-chair, Integrated Systems Analysis and Sustainability Faculty Search Committee August 2013 - May 2014
13. Member, CE Promotions and Tenure Evaluation Committee, 2011, 2019
14. Member, Environmental and Ecological Engineering, Faculty Search Committee, January 2011 - August 2011
15. Member, Graduate Committee, School of Civil Engineering, August 2009-July 2013
16. Graduate coordinator, Transportation Infrastructure Systems Group, August 2009-July 2013
17. Faculty Representative of Civil Engineering, Convocation Ceremony, December 2009, 2011, 2018

- **Rensselaer Polytechnic Institute**

1. Taught the transportation component of the 'Instrumentation and Sensors' class every Fall. (Approximately 2 lectures and related transportation project), 2005-2009.
2. Faculty Advisor of the Institute of Transportation Engineers Chapter at RPI, 2005-2008
3. Faculty Mentor for the NYSDOT-RPI Internship Program, 2005-2008
4. Undergraduate Curriculum Committee, November 2005 to July 2009
5. Faculty Representative at the Engineer's Day and Medallion Open House in 2005.

6. Advisor for Institute Advancement for President's trip to India in March 2006.
7. CEE Sabbatical Committee, November 2006 - May 2007
8. Organizer of Transportation Seminar, Fall 2007.
9. Department Head Search Committee, August 2007 - March 2009
10. Transportation Faculty Search Committee, October 2007 - May 2008
11. Co-chair of the Faculty peer support committee, January 2008 - August 2008. Responsible for producing a mentorship document for the CEE Department Head.
12. Graduate Program Committee. January 2008 - August 2009

- **Memberships**

1. Connected and Autonomous Vehicles Committee, American Society of Civil Engineers (ASCE), October 2023-present.
2. Freight and Logistics Committee, American Society of Civil Engineers (ASCE), October 2023-present.
3. Committee on Automated Transportation Systems, World Congress on Transportation, China National Academies, March 2019-present
4. Committee on Freight Transportation Planning and Logistics (ATO15), Transportation Research Board, National Research Council (January 2012 - December 2020)
5. Committee on Evacuation and Emergency Management, Transportation Research Board, National Research Council, April 2015-April 2021.
6. Network Modeling Committee (ADB30), Transportation Research Board, National Research Council (April 2006 - April 2015)
7. Joint Subcommittee on Road Pricing, Transportation Research Board, National Research Council Transportation Research Board
8. Institute for Operations Research and Management Science (INFORMS)
9. American Society of Civil Engineers (ASCE)
10. Transportation Research Board (TRB)
11. Institute of Electrical and Electronics Engineers (IEEE)

- **Journals/Conferences refereed:**
Reviewer of more than 35 journals. Some of the journals are shown below.

1. Transportation Research Part B, Part C, Part E
2. ASCE Journal of Transportation Engineering
3. Advances in Transportation Studies - An International Journal
4. Transportation Research Record
5. Transportation Science
6. Operations Research
7. Networks and Spatial Economics
8. Institute of Industrial Engineers (IIE) Journal: Part A
9. IEEE Journal of Intelligent Transportation Systems

10. IEEE Transactions of Vehicular Technology
11. ASCE Journal of Infrastructure Engineering, ASCE Journal of Civil Engineering
12. International Journal of Production Economics
13. IEEE Conference of Intelligent Transportation Systems
14. World Conference in Transportation Research
15. IEEE Conference of VTC
16. IEEE Transactions of Big Data
17. Transportation Research Board Conference

- **Books and Manuscript Reviewer:**

1. Mid America Earthquake Center: Reviewer of reports related to hazard mitigation in transportation networks
2. Reviewer of M.S. Thesis for Milton Pikarsky Award, Council of University Transportation Centers (CUTC)- 2006-present.
3. Reviewer of various transportation/optimization related textbooks for Springer and Wiley - Fall 2007-present (12 proposals).

- **Examples of Media Coverage**

1. Social media data Sentiment Analysis: `http://www.theatlanticcities.com/commute/2012/01/i-hate-blue-line-and-other-things-transit-can-learn-twitter/1040/`
2. `http://www.redeyechicago.com/news/cta/ct-red-going-public013102-20120130,0,6591367.story`
3. `http://www.outsidetheloopradio.com/2012/02/02/otl-episode-280-twitter-data-and-cta-riders-chicago-speeding-cameras-the-chicago-stand-up-project/`
4. `http://www.purdue.edu/newsroom/research/2011/111018UkkusuriHurricanes.html`
5. Hurricane Evacuation: `https://engineering.purdue.edu/CE/Media/Impact/2016-Fall/purdue-wins-grant-for-investigating-improving-disaster-recovery`
6. Disaster Recovery: `https://csengineermag.com/article/recovery-lessons-hurricane-sandy/`
7. Disaster Recovery: `https://www.purdue.edu/newsroom/releases/2018/Q4/a-little-help-from-your-friends-is-key-to-natural-disaster-recovery,-purdue-research-study-suggests.html?`