# SATISH V. UKKUSURI

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#### A. <u>Professional Preparation</u>

Indian Institute of Technology, Madras	Civil Engineering	B.Tech.	2001
University of Illinois at Urbana Champaign	Civil Engineering	M.S.	2002
University of Texas at Austin	Transportation	Ph.D.	2005

#### B. Appointments

Professor, Lyles School of Civil Engineering, Purdue University
University Faculty Scholar, Purdue University
Fulbright Scholar, UniNorte, Colombia
High End Foreign Expert to the People's Republic of China
Discovery Park Faculty Scholar, Purdue University
Associate Professor, Lyles School of Civil Engineering, Purdue University
Assistant Professor, Department of Civil Engineering, Rensselaer Polytechnic
Institute
Graduate Research Assistant, University of Texas at Austin
Graduate Research Assistant, University of Illinois at Urbana-Champaign

### C. Products

#### Five Products Most Closely Related to the Proposed Project

- 1. Mesa-Arango, R., Hasan, S., Ukkusuri, S.V. and Murray-Tuite, P. (2013). Household level models for hurricane evacuation destination choice using hurricane Ivan data. *Natural Hazards Review*, 14(1), pp. 11-20.
- Ukkusuri,S.V., Hasan, S., Luong, B., Doan, K., Zhan, X., Murray-Tuite, P. and Yin, W. (2016). A-RESCUE: An Agent based Regional Evacuation Simulator Coupled with User Enriched behavior. Accepted in *Networks and Spatial Economics*.
- 3. Hasan, S. and Ukkusuri, S.V. (2011). A contagion model for understanding the propagation of hurricane warning information. *Transportation Research Part B (Methodological)*, 45(10), pp. 1590-1605.
- 4. Yushimoto, W. and Ukkusuri, S. V. and Jaller, M. Facility location in Disasters: A Vornoi based Hueristic Algorithm with an application to Hurricane Katrina. (2012). *Networks and Spatial Economics*, 12(1), pp. 21-39.
- Hasan, S., Mesa-Arango, R. and Ukkusuri, S.V., Murray-Tuite, P. (2012) Transferability of Hurricane Evacuation Choice Model: Joint Model Estimation using Multiple Data Sources. ASCE Journal of Transportation Engineering, 138(5), pp. 548-556.

### Five Other Significant Products

6. Hasan, S., Mesa-Arango, R. and Ukkusuri, S.V. (2013). A random parameter hazard based model to understand the temporal dynamics of household evacuation timing behavior. *Transportation Research Part C*, 27, pp. 108-116.

- 7. Hasan, S., Ukkusuri, S.V., Gladwin, H. and Murray-Tuite, P. (2011). A behavioral model to understand household level hurricane evacuation decision-making. *ASCE Journal of Transportation Engineering*, 137(5), pp. 341-349.
- 8. Ukkusuri, S.V. and Yushimito, W. (2008). Location Routing Problem for the Humanitarian Prepositioning problem. *Transportation Research Record: Journal of the Transportation Research Board*, 2089, pp.18-25.
- 9. Sadri, A.M., Ukkusuri, S.V., Murray-Tuite, P. and Gladwin, H. (2014). Analysis of hurricane evacuee mode choice behavior. *Transportation Research Part C: Emerging Technologies*, 48, pp. 37-46.
- 10. Zhang, B., Ukkusuri, S.V. and Chan, W.K. A multi-agent simulation model incorporating traffic behavior for hurricane evacuation. In Proceedings of the 2009 *Winter Simulation Conference*, Austin, TX, December 2009. pp. 2778-2784.

## D. Synergestic Activities

- Developed collaborations with various social scientists and policy researchers (Dr. Tricia Wachtendorf, Dr. Yue Ge, Dr. Hugh Gladwin, Dr. Daniel Aldrich, Dr. Seungyoon Lee, Dr. Julian Romero and Dr. Leigh Raymond) on topics in disaster management and sustainable emissions trading policies. Wrote joint proposals and papers with these scholars that resulted in significant impact based on joint publications
- PI of an Interdisciplinary Cluster Hiring at Purdue University to hire seven Faculty across multiple departments including social science and engineering in the area of "Sustainable Communities" including a position in the area of Resiliency in Disasters in 2013-16
- Discovery Park Faculty Scholar Center for Environment, one of five Purdue faculty selected across campus to develop interdisciplinary collaborations and 2015 Fulbright Innovation Fellow Award for developing resilient ICT solutions in Northern Colombia
- Chair of the "Network Resilience in Disasters" conference, "Sustainable Transportation Systems" workshop at IIT Madras in 2014; Co-Chair of the 4<sup>th</sup> International Conference in Dynamic Traffic Assignment, Martha's Vineyard, 2012; Co-Chair of the NSF workshop on Coupled Infrastructure and Social Systems, Martha's Vineyard, 2012; Chair of the International Workshop on "Data Science for Smart Urban Infrastructure Networks", 2016 in Shanghai, China.
- Academic Editor: PLOS One; Area Editor, Networks and Spatial Economics; Editor, Transportation Research Part-C, Associate Editor: Transportmetrica: Part B, Editorial Advisory Board, Transportation Research Part B, Transportation Research Part C; Series Editor Elsevier Series on Smart Urban Mobility