

Computer Science Seminar Series

National Capital Region

From Digital Footprints to Social Insights

Speaker: Prof. Vanessa Frias-Martinez

University of Maryland

Friday, November 20, 2015

1:00PM - 2:00PM, NVC 325

Abstract

The pervasiveness of cell phones, mobile applications and social media is generating vast amounts of information that can reveal a wide range of human behavior. From mobility patterns to social connections, these signals expose insights about how humans behave and interact with their environment. While a lot of work has focused on analyzing behaviors, relatively little effort has been dedicated to understanding ways in which such findings could be useful to decision makers in areas like smart cities or public health. In this talk I will discuss two projects: (1) Tweetland, an automatic intelligent system that uses geo-referenced tweets to compute land use maps and (2) AlertImpact, an agent-based framework that uses cell phone data to model the impact of the preventive actions implemented by the Mexican government during the H1N1 flu outbreak. I will finalize the talk discussing new research directions in the areas of disaster management and traffic modeling.

Biography



Vanessa Frias-Martinez is an assistant professor in the iSchool and an affiliate assistant professor in the Computer Science Department at the University of Maryland. She is the director of the Urban Computing Lab and a member of the CLIP Lab, the Center for Geospatial Information Science and the Maryland Population Research Center. She is interested in social computing, with a focus on the intersection between big data and social development.

Vanessa received her M.Sc. and Ph.D. degrees in Computer Science from Columbia University. From 2009 to 2013, she was a researcher in the Data Mining and User Modeling Group at Telefonica Research in Madrid, Spain.