Using social media data for estimating migration patterns

Join Monica Alexander an Assistant Professor in Statistical Sciences and Sociology at the University of Toronto. Her research focuses on developing statistical methods to help measure demographic and health outcomes.

Examining migration patterns and how they change over time has important implications for understanding broader population trends, effectively designing policy and allocating resources. However, data on migration movements are often lacking, and those that do exist are not produced in a timely manner. Social media data offer new opportunities to provide more up-to-date demographic estimates and to complement more-traditional data sources. Facebook, for example, can be thought of as a large digital census that is regularly updated. However, its users are not representative of the underlying population. In this talk, I will discuss methods that adjust for these data issues and use social media data to estimate migration patterns. I will draw on an example of estimating migration into the US; and another of migration out of Puerto Rico after Hurricane Maria.