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GI_Forum Opening Keynote on Tuesday, July 7, 2020

Young Researchers' Corner on Wednesday, July 8 from 15:30 – 17:00 at HS 413

"Data & Deception: Geographies of Misinformation and Incivility in Social Media"

The practice of geospatial data analysis and earth observation has been changing, often driven by the 'Big Data' movement or simply real-time data streams. Yet, the underlying purpose remains consistent – transforming the available data into useful results. This paper (presentation) reviews the variety of data implied by the papers presented at GI_Forum 2019 and in recent issues of international journals. These are compared to the variety of data referenced at Auto-Carto 8 (1987), London (1988), and 9 (1989). The data sources from the past and the present are examined in terms of their measurement frameworks. Looking beyond the changes in data available, the main analytical purpose is to transform the available data into useable information, altering the measurement framework. There is considerable continuity, since some basic functions remain as crucial as they were thirty years ago. Of the emerging data types, some are better served than others. The conversion toward point clouds for 3D objects is essentially complete. The author argues that trajectory data (records of movement) still need attention. The important continuity is the demand to transform raw data into different measurement frameworks. The research communities (Global Earth Observation, GI Science, and their partners) should address new challenges in temporally-rich data streams that were missing in earlier decades.

Short bio

Monica Stephens, PhD, is an Assistant Professor in the Department of Geography at the University at Buffalo (SUNY) in New York. She obtained her doctoral degree from the University of Arizona in 2012, worked as a visiting scholar at the University of Kentucky and an Assistant Professor at Humboldt State University in California. Her research utilizes methodologies derived from GIS and data science to examine how user-generated content and social media create inequalities that leave communities vulnerable to misinformation, social inequalities, and marginalization. She is a member of www.FloatingSheep.org, a site dedicated to maps and commentary of geographic internet data. Her work on social media has appeared in popular outlets including *Wired Magazine*, *The New York Times*, *The Guardian*, the *Washington Post*, and *BBC World Service*.

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