

LSGI Talk Series: Emerging Topics in Geospatial and Urban Science

Applying Geospatial Data Science Techniques in Urban and Health Research

Date: 6 Aug 2021 (Friday)

Time: 9:30am - 10:30am

Venue: Online

Language: English

Bio:

As a geospatial data scientist, Dr. Yao's broad research interests focus on geospatial techniques ranging from GIS, spatial statistics, machine learning methods, network analysis, geovisualization, and geospatial big data analytics and modeling. With domain interests in urban informatics, public health, and human dynamics, she applies geospatial techniques to study urban systems, human mobilities, spatial-social interactions, spatiotemporal patterns of diseases, the spread of infectious diseases, health disparity, and very often the interactions between these different topics.

Dr. Yao is an internationally known scholar in GIScience. She has been chairing the ICA (international cartographic association) [commission](#) on Geospatial Analysis and Modeling for the past eight years. In that capacity, she has co-organized a series of professional meetings and edited journal special issues. She is currently Vice President of the Cartography and Geographic Information Society ([CaGIS](#)), a professional society that supports research, education, and practices of geospatial information and techniques. She also serves as a director of the [UCGIS](#) (university consortium for geographic information science).

Dr. Yao obtained her Ph.D. in Geography from the State University of New York at Buffalo in USA and received her M.S. in GIS for urban applications from the International Institute of Aerospace and Earth Science (now Twente University) in the Netherlands. She is originally from China and received her B.S. degree in GIS from WTUSM (now Wuhan University).

Abstract:

Stemming from several related scientific fields, geospatial data science has rapidly increased its popularity in a wide range of application areas. Focusing on the role of geospatial data science in urban and health research areas, this talk will share two research projects that apply traditional geospatial techniques or newly developed methods to address urban and health research questions. In the urban research project, we collect and model social media data (Facebook data) to help understand human interactions in the virtual and physical spaces by constructing and analyzing social-spatial networks. In the health research, we apply GIS data processing techniques and Bayesian spatiotemporal modeling to investigate health disparity in female breast cancer survival rates.

All are welcome. To register, please [click here](#) for the details.

Registrants will receive the online talk information one day before it starts.

For enquiries, please contact Ms Anna Choi at 3400 8158 or anna.choi@polyu.edu.hk



Speaker:

Prof. Xiaobai Angela Yao

Professor

Geography Department, University of Georgia