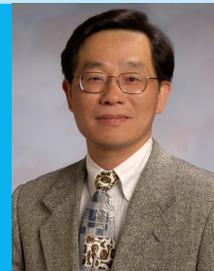


LSGI Distinguished Lecture Series

GIScience for Human Dynamics Research

Dr. Shih-Lung SHAW
Alvin and Sally Beaman Professor
Arts and Sciences Excellence Professor
University of Tennessee
Knoxville, USA



Date : 22 June 2017 (Thursday)

Time : 10:00 AM

Venue : Z509

Abstract

Due to widespread use of location-aware technology, information and communication technology (ICT), and mobile technology, there have been many important changes to how people carry out their activities and interactions and how the urban, economic and social systems operate in today's world. With the arrival of a Big Data era, unprecedented data collection of a wide range of human activities and their environments offer opportunities for us to gain insight on human dynamics. In the meantime, these opportunities also present many challenges to both geographic information systems (GIS) and geographic information science (GIScience) to properly support human dynamics research. This presentation will first discuss some important changes to human dynamics in the modern world, followed by some examples of our work of developing a space-time GIS for human dynamics research and using mobile phone data to examine spatiotemporal human mobility patterns. Finally, this presentation will provide a critical review of the conventional GIS and offers an approach of representing human dynamics based on a multiple-space framework to integrate complex human dynamics in the modern world. This "new" approach for GIScience and GIS can better support human dynamics research in a hybrid physical-virtual space and within a space-time context.

Biography

Dr. Shih-Lung Shaw is Alvin and Sally Beaman Professor and Arts and Sciences Excellence Professor of Geography as well as the Director of Confucius Institute at the University of Tennessee, Knoxville. He received his Ph.D. and M.A. degrees from The Ohio State University and his B.S. degree from National Taiwan University. His research interests cover GIS for transportation (GIS-T), space-time GIS, time geography, transportation planning and modeling, and human dynamics. His recent research has focused on space-time analytics of human dynamics in a hybrid physical-virtual world based on various types of individual tracking data such as cell phone data, taxi tracking data, travel-activity survey data, and online social media data. Dr. Shaw currently represents the University Consortium for Geographic Information Science (UCGIS) as an expert panel member to review the U.S. National Spatial Data Infrastructure (NSDI) for the Coalition of Geospatial Organizations. He also serves on the editorial board of International Journal of Geographical Information Science, Journal of Transport Geography, Travel Behaviour and Society, and Geographical Research (China). Dr. Shaw is a Faculty Fellow of the Center for Transportation Research and an affiliated faculty of the Center for Intelligent Systems and Machine Learning and the Center for Sustainable Business and Tourism at the University of Tennessee, Knoxville. He is also appointed as a Guest Professor of Wuhan University and Southeast University in China and a Research Fellow of the Institute of Space and Earth Information Science at the Chinese University of Hong Kong. For additional information, please visit <http://geography.utk.edu/about-us/faculty/dr-shih-lung-shaw/>.

All interested are WELCOME!

Registered attendees will receive a Certificate of Attendance after lecture.

To register, please go to link: <https://www.polyu.edu.hk/mysurvey/index.php/466799>

For enquiries, please contact Ms. Olivia Poon at olivia.poon@polyu.edu.hk or 3400 3897.

