Good morning,
You are invited to attend our weekly ECE Graduate Seminar.

**Old Dominion University**
**College of Engineering and Technology**
**Department of Electrical and Computer Engineering**

All lectures to be held at 3:00pm on Fridays online at ODU DL: ECE 731 831 Grad Seminar

For more information, contact Dr. Chung Hao Chen at (757) 683-3475 or email cxchen@odu.edu.

**Friday, October 29, 2021 Seminar Topic:**

**HUMAN MOBILITY ANALYSIS, MODELING AND SIMULATION FOR COVID-19** by Dr. Hamdi Kavak, Ph.D., Assistant Professor in Computational and Data Sciences and Co-Director for the Center of Social Complexity at George Mason University

**Abstract:**
Human mobility is a critical phenomenon impacting everyday life, from the spread of infectious diseases to transportation and urban planning. In this talk, Dr. Hamdi Kavak will discuss two interconnected research efforts related to human mobility. First, he will discuss how human mobility changed during COVID-19, explained using SafeGraph foot traffic data. The results here will show mobility change varies spatiotemporally and demographically. Second, he will present data-driven human mobility modeling in agent-based models. The talk will delve into technical details and results from these studies. Since human mobility contributes significantly to the spread of SARS-CoV-2, this line of work sheds light on disease modeling efforts.

**Bio**:
Dr. Hamdi Kavak is Assistant Professor at the Computational and Data Sciences Department at George Mason University (GMU) and Co-Director of the Center for Social Complexity at GMU. He has Master's and Ph.D. degrees in Modeling and Simulation from Old Dominion University. His research focuses on the intersection of simulation modeling and data science; and he regularly applies his research to the study of human mobility, disease spread, and cybersecurity. Dr. Kavak is the recipient of the SCS' Young Simulation Scientist Award in 2021 and Associate Editor of SIMULATION: Transactions of The Society for Modeling and Simulation International. His current research efforts are supported by external grants from the National Science Foundation, the Defense Threat Reduction Agency, the Department of Homeland Security, and the Commonwealth Cyber Initiative.