Instructor

Dr. Nathaniel Osgood, Associate Professor in the Department of Computer Science and Associate Faculty in the Department of Community Health & Epidemiology, University of Saskatchewan

About the Instructor

Nathaniel Osgood is Associate Professor in the Department of Computer Science and Associate Faculty in the Department of Community Health & Epidemiology, and Division of Bioengineering at the University of Saskatchewan. His research – which has resulted in dozens of papers in peer-reviewed journals and conferences – is focused on providing tools to inform understanding of population health trends and health policy tradeoffs. Dr. Osgood has been applying Agent-Based modeling to improve decision making (particularly in health) for over 20 years, including work conducted in the communicable, chronic and zoonotic disease areas, and in social and environmental epidemiology. Dr. Osgood has additionally contributed novel innovations to ease the Agent-Based modeling process, and new techniques that hybridize Agent-based models with System Dynamics and Social Networks Analysis approaches, which combine simulation models with decision analytic approaches, and which leverage such models using data gathered from wireless real-time sensor-based epidemiological monitoring systems. Dr. Osgood’s award-winning teaching at the U of S draws students from around campus. Beyond the U of S, Dr. Osgood has taught tutorials on simulation internationally, and has served as a course instructor, guest lecturer, and plenary speaker on simulation modeling for health for the NIH-sponsored Institute for Systems Science and Health. The material presented in the bootcamp was also the focus of his recent MIT graduate-level course in Agent-Based modeling for health. Prior to joining the U of S faculty, Dr. Osgood worked for many years in a number of academic and industry positions, including on industry & academic projects applying modeling to tobacco and environmental epidemiology, health informatics, and multi-framework modeling for natural resource policy-making. Screencasts of many of Dr. Osgood’s previous ABM courses are available at http://tinyurl.com/ABMForHealth, with additional talks and lectures available at http://tinyurl.com/OsgoodModelingVideos