THE DEPARTMENT OF COMPUTER SCIENCE &
THE DATA SCIENCE TRANSDISCIPLINARY WORKING GROUP &
COMPUTER SCIENCE GRADUATE STUDENT ORGANIZATION (GSOCS) PRESENT

INVITED SPEAKER SERIES

Professor Henry Kautz

Abstract: People posting to social media on smartphones can be viewed as an organic sensor network for public health data, picking up information about the spread of disease, lifestyle factors that influence health, and pinpointing sources of disease. We show how a faint but actionable signal can be detected in vast amounts of social media data using statistical natural language and social network models. We present case studies of predicting influenza transmission and per-city rates, discovering patterns of alcohol consumption in different neighborhoods, and tracking down the sources of foodborne illness.