ABSTRACT

The quality of data given as input to an algorithm determines the quality of its output. Unfortunately, in the real-world, quality of data is often compromised by problems such as missing values, measurement error, selection bias and interference. This talk will focus on two of these problems: missing data and interference. In particular, this talk will outline how causal graphs can be used to model these problems and derive conditions under which consistent estimates of quantities of interest such as mean of a variable and causal effect can be computed.

SPEAKER BIO

Karthika Mohan is an assistant professor of computer science in the School of EECS at Oregon State University. Before joining Oregon State University she was a postdoctoral scholar in the Computer Science department at University of California, Berkeley mentored by Stuart Russell. Karthika received her PhD in computer science (artificial intelligence) from University of California, Los Angeles where she was advised by Judea Pearl. Her research is of an interdisciplinary nature and her areas of interest include causal inference, graphical models and AI safety. She was awarded the Google Outstanding Graduate Research Award, 2017, which is a UCLA commencement award. Currently she serves on the editorial board of the Journal of Causal Inference.