Decision Processes Colloquia

Monday, April 29, 2019

Where: 340 JMHH

When: 12:00 – 1:20 pm

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Understanding Physician Decisions using Machine Learning Algorithms: The Case of Stress Testing

ABSTRACT:

In this talk I will describe work we have been doing that analyzes physician decision-making using machine learning algorithms. In particular, we study an iconic decision: testing for heart attack. By comparing doctors' decisions to individualized, algorithmic risk estimates, we are able to assess the optimality of these decisions. In addition by building a predictive model of the decision itself we make some sense of the kind of human biases that result. The work in many ways can be thought of a revisiting of Dawes' seminal work using modern algorithmic tools and richer, larger data.

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