USC Center for Artificial Intelligence in Society presents...

Dr. Sze-Chuan Suen

A POMDP Model for Drug Resistant Tuberculosis Screening

Patients with drug resistant disease may need different treatment than those with drug-sensitive disease. However, identifying these patients may be difficult since tests to determine disease strain may be time consuming or costly. In this project, we develop a model using POMDP and simulation techniques to identify when and which first-line tuberculosis patients are most likely at risk for drug resistance and should be screened to reduce costs and increase health outcomes.

Thursday, October 26th, 4-5 p.m. Mudd Hall (MHP) 101

This lecture satisfies requirements for CSCI 591: Research Colloquium.

Sze-chuan Suen received her PhD in the department of Management Science and Engineering from Stanford University in 2016. Her research interests include developing applied mathematical models to identify epidemiological trends and evaluate health policies to support informed decision-making. Her research draws from techniques in simulation, dynamic systems modeling, optimization, and decision analysis.

