

Fall Colloquium

November 21, 3:30-4:30pm

Seitz 313

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Distributed Computational Methods For Healthcare Access Modeling

The research presented in this seminar has been motivated by one of my research programs to bring rigor in measurement of and inference on healthcare access, with a recent book to be released, titled Healthcare System Access: Measurement, Inference and Intervention. I will begin with an overview of the underlying framework to assess healthcare access with a focus on health policy making. I will use this framework to motivate the access model, a classic assignment optimization but with many important computational challenges, including spatial dependence in the outcome measures, complex system constraints, large-scale decision space among other. I will present computationally efficient methods for addressing large-scale optimization problems accounting for spatial coupling in the context of uncertainty quantification.