

USC Center for Artificial Intelligence in Society presents...

Andrew Perrault

Developing and Coordinating Autonomous Agents for Efficient Electricity Markets

Aggressive greenhouse gas reduction targets will necessitate a transformation of energy use systems, with increasing emphasis on electricity, which can be decarbonized more efficiently than other energy sources. Mr. Perrault argues that deploying consumer-representing autonomous agents can make this transformation less expensive by allowing attention-limited consumers to respond to changes in market conditions. The talk has two parts: in Part I, he develops a cooperative game theoretic model that illustrates the value of such agents in electricity markets. In Part II, he focuses on the problem of training such an agent using a new variant of preference elicitation called experiential elicitation.

March 7th, 4-5 p.m., Mudd Hall (MHP) 101

This lecture satisfies requirements for
CSCI 591: Research Colloquium.



Andrew Perrault is a PhD student at University of Toronto, supervised by Craig Boutilier. His research focuses on the application of AI to electricity markets and electricity use. He is the co-founder and co-lead developer at theschoolfund.org, a non-profit that crowdfunds scholarships for secondary school students in developing countries.