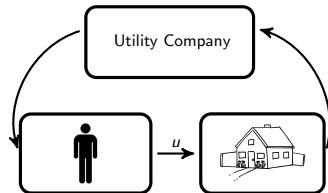# Non-Intrusive Load Monitoring and Beyond

Henrik Ohlsson, Roy Dong, Lillian Ratliff, and S. Shankar Sastry
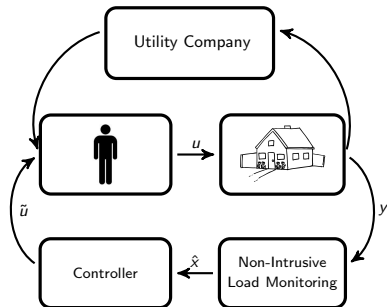Dept. of Electrical Engineering & Computer Sciences,
UC Berkeley, CA, USA

Non-Intrusive Load Monitoring and Beyond

- Traditional setup, feedback once a month
- Help people saving energy by better feedback
- Challenging modeling, estimation and control problems
- Interesting security and privacy problems (A. Cardenas, G. Schwartz, H. Sandberg, A. Teixeira)
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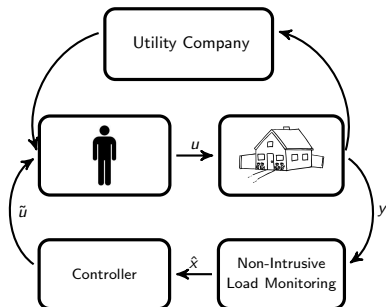- Interesting security and privacy problems (A. Cardenas, G. Schwartz, H. Sandberg, A. Teixeira)
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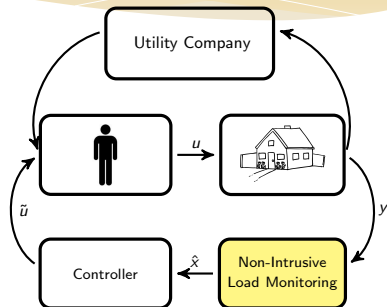- h-CPS

The Control Problem

Game formulation:

- Principal-agent problem
- Principal: have accurate disaggregated power information, revenue decoupling, limit feedback
- Agent: wants to save money but live a comfortable life, inaccurate disaggregated power information,
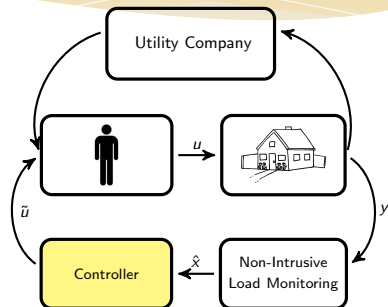
Work by Lillian Ratliff, UC Berkeley.

Work by Roy Dong, UC Berkeley.
Next presentation.

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