



School of Engineering Center for Cyber-Physical Systems and the Internet of Things

Ethics and Privacy in Cyber Physical Systems

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Pro-consumers Demand-Response





Load Adjustment/Curtailment

Price Discrimination









Impact on Privacy and Ethics

- Sharing of data to support efficiency → loss of privacy and misuse of data
- Automated actors connected to the power grid → political and legal issues concerning reliability and resilience
- Digital Divide been haves and have-nots
- Pro-consumer liabilities and responsibilities







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Cyber

- Sensors and Comm.
- Network Infrastructure
- Applications
- Distributed Systems

Physical

- Power Grids
- Water Distribution
- Gas Pipelines
- Transportation

Humans

- Demand Response
- System Operators
- Semi-Cooperative
- Adversarial





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Thank you

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