

## **Information/Networks**

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## **Networks, Information, and Systems/Control**

- Ubiquitous networks (wireless, ...)  
transport data cheaply
- Cheap (embedded, integrated) sensors  
collect vast amounts of data
- Processing power plentiful

**→ we're cleverness limited**

### Overarching themes

**Optimization, control, and validation of networks**  
**Networks for coordinating embedded devices**  
**Information extraction from dynamic data**  
**Distributed computation**

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### Networks for Control

- Distributed asynchronous
- Packet based
- Varying topology, delays, ...

**If we get it right:**

- We get a system with the resilience of a network and the performance of a current control system

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### Who are we?

**There are multi-disciplinary (CS, networks, stat, ...)**

**What we bring:**

- Modeling
- Engineering sense
- Rigor
- Optimization
- Dynamics
- Prob & statistics
- Analysis of uncertainty, ...
- Etc