Efficient Information Spread Control in CPS

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Impact of (mis)Information

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AP CorpComm ✔
@AP_CorpComm

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The @AP Twitter account has been suspended after it was hacked. The tweet about an attack on the White House was false.
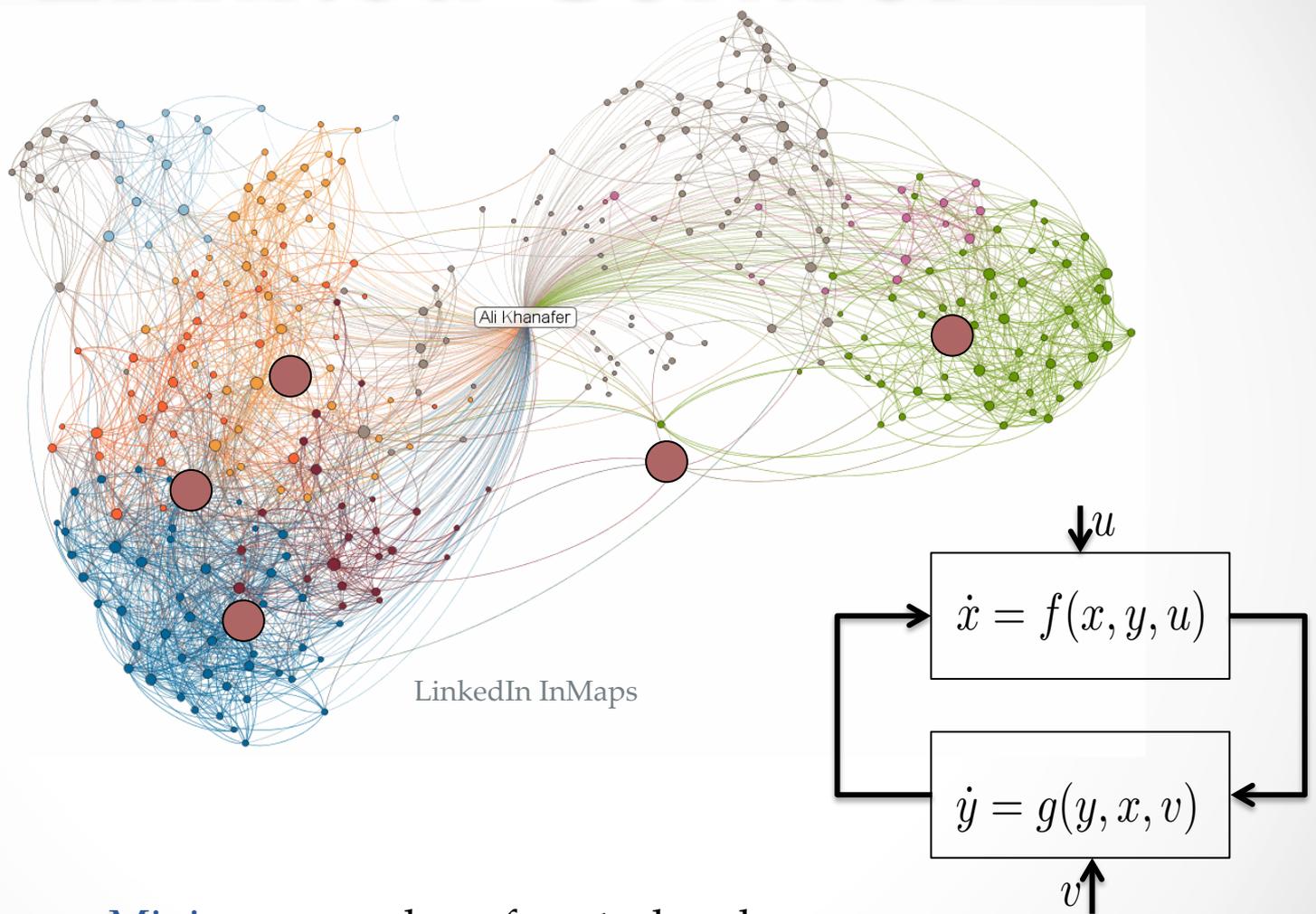
12:25 PM - 23 Apr 2013
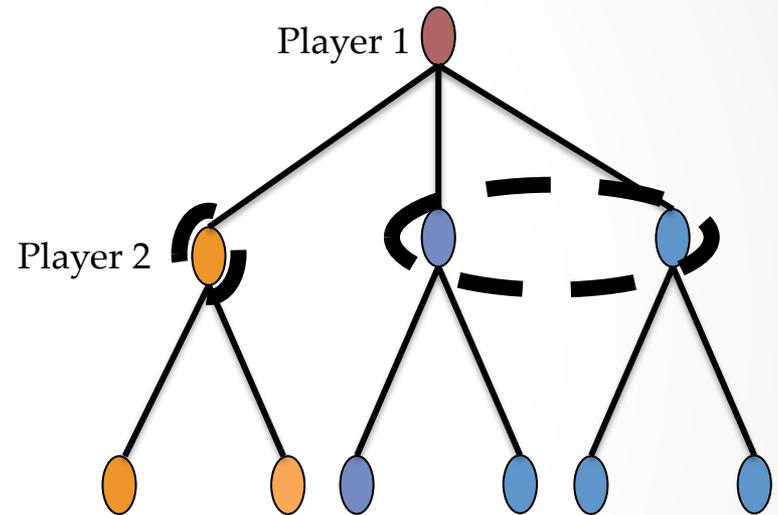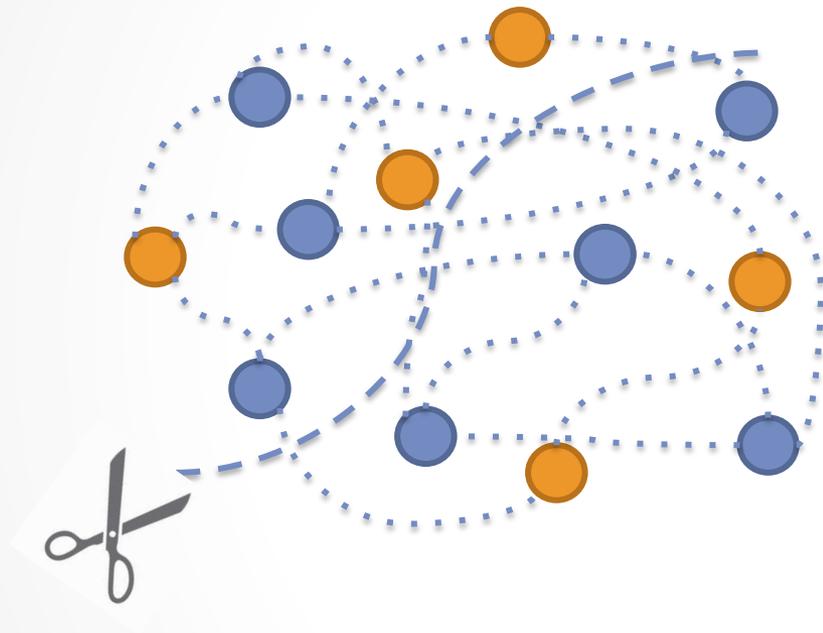
444 RETWEETS **30** FAVORITES

Impact of (mis)Information

Limited Control

LinkedIn InMaps

Ali Khanafer

$$\dot{x} = f(x, y, u)$$

$$\dot{y} = g(y, x, v)$$

u

v

- **Minimum** number of control nodes
- **Which** nodes to control?
- Proof of concept: Virus spread control

Uncertainties and Failures

- Robust distributed controllers
- Proof of concept: Robust distributed averaging

- Unknown user types: motivates game theory

Thank you!