

Session 11: Working Lunch Report backs from Workshops

Jonathan Sprinkle

DISRUPTIVE research areas that will move CPS to CPS 2025.

- Describe the research area
- Why is the area disruptive
- What can't we do now that could happen

Got slides? Bring them on a stick to Stephen Rees at the A/V table.

- What are you trying to do? Articulate your objectives using absolutely no jargon.
- How is it done today, and what are the limits of current practice?
- What is new in your approach and why do you think it will be successful?
- **Who cares? If you succeed, what difference will it make?**
- What are the risks?
- How much will it cost?
- How long will it take?
- What are the mid-term and final “exams” to check for success?



So What?

DISRUPTIVE INNOVATION

ADOPTION TIMESCALE	DECIDED AT POINT OF USE	DECIDED AT STRATEGIC LEVEL	ADOPTION USER SCALE
SHORT-TERM (MONTHS/YEARS)	UBER/LYFT NAPSTER/SPOTIFY NETFLIX/HULU	NEW COKE iPHONE	APPLICATIONS
MID-TERM (DECADES)	AMAZON FACEBOOK	HEALTHCARE IT	PLATFORMS
LONG-TERM (GENERATIONS)	SUBURBS	REGIONAL PLANNING	SYSTEMS OF SYSTEMS

Outbriefs: 5 minutes each

1. Smart Grid Resiliency and Security
2. Reliable Autonomy for Human Cyber-Physical Systems
3. Formal Methods in Cyber-Physical Systems: Impact and Future Directions
4. CPS Security & Privacy: From Theory to Practice: A Decade-Long Plan
5. Societal Implications of CPS in Smart Cities
6. Human-Machine Medical CPS Workshop: Engineering Human Health - Your life Depends on IT!
7. CPS Challenges for Unmanned and Autonomous Systems
8. Challenges and Opportunities for Bringing Smart Services to Underserved Urban Communities