

# What we learned this summer...

- Not only the material presented, but...
- Resources
  - Each other, instructors, *interactive* HRI archive
  - URL: <http://great-white.csee.usf.edu/hriweb/>
- Meeting your colleagues
  - These are the people that will be reviewing your papers and with whom you will be collaborating

# HRI is interdisciplinary

- HCI/Usability
- Cognitive Science
- Robotics
- Artificial Intelligence
- Psychology
- ...
- You are entering a very new interdisciplinary field

# Supporting technologies

- Navigation and mobility
- Manipulation and dexterity
- Platforms (Humanoid and other?)
- Perception and sensors
- Speech gesture recognition and NLP
- Cognitive modeling
- Interaction design
- Evaluation methodologies
- Machine learning, AI

# HRI Challenges

- Cognitively-compatible models; understanding the human
- Situational awareness (internal state, external state and context)
- Designing for the “disruptive” technology
  - Paradigm shift
- Dynamic autonomy, mixed-initiative, collaboration, evolving partnership
- Multi-X (people, robots, cultures, communication...)
- Trust, acceptance, impact, reliability...
- Long-term (social) interaction
- Learning and adaptation

# HRI Challenges

## Meta-Issues

- Take advantage of commonalities across subfields
  - Domains (e.g. USAR, health care, education, etc)
  - Leverage lessons learned across subfields
- Differences in “language” between subfields
  - Get more breadth across disciplines; learn to speak the languages
  - Collaborate across subfields
- Sharing across subfields...

# HRI Challenges

## Meta-Issues

- Where to submit papers?
  - More difficult: HCI, Cogsci
  - Somewhat easier (maybe): Robotics, AI, language
  - Need to educate these communities
  - HRI specific:
    - IEEE RO-MAN 2005 (Nashville)
    - Starting in 2006: ACM Human-Robot Interaction
    - Special issues

# HRI Challenges

## Meta meta-issues!

- Re-educating the field!
- Funding!!
  - But Henrik said this was not a problem... just come see him! (EU only?)
  - Educate the funding agencies
- HRI Textbook