# Prosthetics & Cybernetics

RJ 14, Internet of Things: Sunday, 11:59pm Ethical Analysis 2: Monday, 5pm

# Bookkeeping



2

Wed 11/12	Prosthetics and Cybernetics  Quiz	Armed for the Future Prosthetics for the Able-Bodied Prosthetics and Nerves Aimee Mullins' TED talk	Due Nov 16, 11:59pm:  – RJ 14: Internet of Things  Due Nov 17, 5pm:  – Ethical Analysis 2
Mon 11/17	Internet of Things	What is the Internet of Things? Ethical Issues and the IoT Near-Term Security and Privacy Concerns	Due Nov 18, 11:59pm:  – RJ 15: Privacy and Commerce
Wed 11/19	Privacy and Commerce		Due Nov 23, 11:59pm:  - RJ 16: Technology in Prisons
Mon 11/24	Technology in Prisons		Due Nov 25, 11:59pm:  - Participation Portfolio 3 Due Nov 30, 11:59pm:  - Final Paper Worksheet Due Dec 3, 5pm:  - Final Paper

Wed 11/26	Lecture: How to give a good presentation, what is expected from the final project presentation, and meetings students who miss this class are solely responsible for making sure they understand what is expected of them a	
Mon 12/1	Student presentations	
Wed 12/3	Student presentations	

## Uses of Cybernetics















### Disabled, Able, and Super-Able

#### Disabled:

- "Having a physical or mental condition that limits movements, senses, or activities."
- ◆ Compared to who? I can't lift 180 kg.
- ◆ 20-20 vision is comparatively new.
- Prosthetics: pacemakers, cochlear implants, bionic limbs, retinal implants
- ◆ Beyond able-bodied...
  - ◆ For work: TALOS; EKSO
  - For information: Google Glass
  - ◆ For fun?



#### Possible Problems



- Philosophical concerns
  - Should we "improve on" people?
  - And how is accommodating disability different?
    - ◆ What basic assumptions are new in the last few hundred years?
    - ◆ 20-20 vision, good nutrition (height), straight limbs, ...
  - What would a post-embedded-Glass world look like?
- Haves and Have-nots
  - Health care access
    - Location and physical access
    - Money and insurance
- ◆ What else?

#### Discussion



◆ Pick one question and form an answer as a group:

Should people all be guaranteed the same access to devices? If not, why? If so, how?

◆ Should there be regulation or codes preventing people from using "super-human" advances? Why or why not?