Final Exam

• **Final exam:** Monday 12/18 at 7pm in 2079 Natural History Building

• **Conflict:** Monday 12/18 at 8am in 1103 Siebel Center

• **Conflict Conflict:** Friday 12/15 at 8am in 1304 Siebel Center

• Practice exam has been posted

• **Extra credit:** Watch CitizenFour
Administrative stuff

- W11 due today, R11 due Wednesday
- Good news, everyone!
  - Dropping 1 additional attendance (2 total)
  - Dropping 1 additional writing assignment (2 total)
- Presentations finish next week
- ICES at the end of lecture today
CS210: Emerging Technologies

CS210 Fall 2017

Lecture 13
CHALLENGES CONTINUE
1. Privacy: Facebook ”revenge porn” system
2. Cybercrime: NiceHash loses $70M of Bitcoin
3. Censorship: YouTube Kids videos
4. Commerce: Bitcoin value skyrocketing
5. Net neutrality: Trump admin rolling back
6. Professionalism: Uber hid data breach
7. Intellectual property: John Deere hacking
CHALLENGES OF VIRTUAL WORLDS
Misrepresentation

• Intense experience of virtual worlds could distort our view of reality
• Could be used to manipulate or deceive participants
• Could be used to blur distinction between reality and virtual worlds
• Could we ever be trapped in a virtual world?
  A) Yes  B) No
Virtual Harm

• Is it unethical to cause virtual harm?
  A) Yes    B) No

• Argument from moral development:
  – Harming virtual objects lessens our sensitivity to real harm
  – Trains us to accept immoral behavior

• Argument from psychological harm:
  – Viewing virtual harm can traumatize viewer
CHALLENGES OF AUTOMATION
Automation

• Automation and causes *job displacement*
  – Over 3 million US workers are drivers
• Retail is suffering heavily under automation
• Even law and medicine are being automated
• Remote work allows easier job outsourcing
• How will people earn a living in our increasingly connected and automated world?
Automated Warfare

• Is it safer? For who?
• Does it desensitize the operator?
• Do we risk encouraging war?
• Do we risk losing control?
CHALLENGES TO HUMANITY
Humanity of Cyborgs

• Should we enhance our abilities beyond what is human?
• Are the cognitively assisted losing their humanity or self?
• Is it possible to become a machine? Is there a dividing line?
• Could we ever be uploaded into a machine?

A) Yes  B) No
Humanity of Machines

• Could a machine think?
• Can machines make ethical decisions?
• Should they make ethical decisions?
• Can a machine be a moral agent?
• Could a machine ever be considered human?
• What are our duties to machines?
• What are their duties to us?
1) A robot may not injure a human being or, through inaction, allow a human being to come to harm.

2) A robot must obey orders given it by human beings except when such orders would conflict with the first law.

3) A robot must protect its own existences, as long as it does not conflict with the First or Second Laws.

Isaac Asimov’s
Three Laws of Robotics