Course Goals

Identify the ethical issues that relate to computing in real situations you may encounter.
Decide whether a given action is ethical within the context of professional computing ethics, and justify that decision.
Look up relevant ethical standards developed by the ACM.
Prepare and deliver a short professional-quality talk on a topic relating to ethical, legal, and social implications of computing.
Research and write a professional-quality paper about a topic relating to social, legal, and ethical implications of computing.
Recognize situations in which there may be computing-related legal issues and know some legal principles to apply.
State several important impacts of computing on society.
State several examples of important ethical principles as they apply to computing related situations.
**Syllabus**

**Time and Location.** Mondays, 12:00-13:50 in FAB 40-06

**Moodle.** http://svcs.cs.pdx.edu/moodle/cs305


**Grading Policies.** Grades will be based on homework (20%), attendance/participation (10%), preliminary slides & abstract (10%), your presentation (20%), your evaluation of others’ presentations (10%), your paper (20%) and the final exam (10%). **In order to pass this class, you must receive at least 50% of the points in each category.**

**E-Mail Policy.** Any e-mail sent will go to your PSU @pdx.edu address. Barring special circumstances, you should check it daily.

**Academic Integrity.** You are expected to behave with integrity at all times. Cheating will result in a grade of zero on the assignment or exam on which the student cheats and the initiation of disciplinary action at the university level. Allowing another student to use your work as his/her own is also academic misconduct.
Computing and Society

How has computing and digital technology affected society?
Computing and Society

How has computing and digital technology affected society? Digital technology allows us to store, organize and retrieve massive amounts of data.
How Did We Get Here?
Storing, Organizing and Retrieving Massive Amounts of Data

Storing Data

Wax Tablets [2000BC] – auxiliary storage

Codex [200s] – from scrolls to books

The Printing Press [1450s] – write once, produce many
How Did We Get Here?
Storing, Organizing and Retrieving Massive Amounts of Data

Paper Tape [1870s]

Punched Cards [1890s] – Herman Hollarith

Magnetic Storage [1920s] - audio
How Did We Get Here?
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Magnetic Data Tape [1951] - ~10M on a 2400’ reel

Hard Disk [1956] – 5M @ $35K/year – RANDOM ACCESS!
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Acquiring Data
Keyboarding [1920s] – IBM card punch

Optical Character Recognition [1950s]

Speech Recognition [1961]

Barcodes [1974]
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Radio-frequency identification (RFID) [1980s]

Video Recognition [1990s]
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Processing Data
Tabular summaries

Computations

Models

Predictions
Computing and Society

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Digital technology allows anybody to communicate with thousands or millions of people at a time
CS305 - Social, Ethical, and Legal Implications of Computing

- Spring 2011 -
  Bart Massey (bart@cs.pdx.edu)
  Warren Harrison  
  (warren@cs.pdx.edu)
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