Digital Humanity (Spring 2016)
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How have computational devices affected the way we think of what it means to be human? This faculty-led Honors College seminar prepares students to critically examine the intersections between digital devices and human life. Assignments include regular online posts to Tumblr, a curation project, composition projects with new software tools, and a final presentation. In units focused on Computers & Humans, Surveillance, Big Data, and Fun, we question what it means to be human in a space of pervasive digitality. The course is open to all undergraduates eligible for Honors College enrollment at Pitt.

After successfully completing this course, students will be able to:
• Demonstrate a more sophisticated understanding of the ways digital technologies affect their lives and the lives of their peers as well as how these technologies may be used in their academic and professional careers.
• Assess their own work and process, including their ability to speak to particular audiences, and their strengths and weaknesses as composers.
• Name and perform several analytical techniques used by different segments of the humanities, including visual and textual analysis.
• Use different software packages or web services that process text, still images, moving images, and audio files.

Readings
Readings will include theoretical, technical articles, news stories, games and creative work. Everything will be available on CourseWeb or online for free.

Software
You will be introduced and expected to compose with several different tools focused on text processing, data visualization, and GIS or time/space mapping. Examples: Inklewriter; Tumblr; Tiki-Toki; New Hive; ArcGIS. All software will be available for free download or at Pitt labs.

Assignments
Tumblr posts: Students will post approximately 12 times during the semester on Tumblr, and they will curate a collection of four posts for a final assessment.

Unit Projects: In three units of the semester (Computers & Humans, Surveillance, and Big Data), students will use a software program to create a project reflecting themes of the unit. The emphasis of these projects is on process, not product. You’ll be expected to try to do something interesting, even if you don’t succeed.

Course Retrospective Project: The Course Retrospective Project asks students to confront their own digital humanity. The final project will resemble a unit project and may draw on one of the
software tools and ideas explored earlier in the course. Projects will be presented in the last weeks of the course, and there will a public exhibition of some of the projects.

Unit Descriptions

1. WHAT ARE COMPUTERS? WHAT ARE HUMANS?
If human bodies can be computers, wear computers, design, physically construct, and program computers, where are the lines between humans and machines? We'll look at the history of digital computing and learn how contemporary computers and peripherals actually work. Can computers become more human or humans become more like computers?

**Readings include:** “Man Computer Symbiosis” (J.C.R. Licklider); “When Computers were Women” (Jennifer Light); *How we Think* (Katherine Hayles); “Computing Machinery and Intelligence” (Alan Turing)

**Examples to explore for this unit include:** 1960s advertisements and government promos about computers; retro computer projects like the Google BBS; Eliza/Doctor bot; William Gibson scifi; Stelarc experiments; Google Glass

2. SURVEILLANCE
As you sit at a screen—your smartphone, an ATM, your Facebook News Feed—you are watching something. Are you being watched back? Digital technology speeds up and complicates these surveillance feedback loops. How much of your life is private and how much of it is public?

**Readings include:** Panopticism (Michel Foucault); *Our Biometric Future* (Kelly Gates); Readings on Facebook and privacy; government surveillance and NSA PRISM program

**Examples to explore for this unit include:** Hasan Elahi’s self-tracking art/protest project; films such as Colossus (1970) or War Games (1983) or 2001: A Space Odyssey (1968); Ed tech such as Courseweb and clickers; the Quantified Self movement

3. BIG DATA
We use computers to process the "big data" of our global financial system and scientific areas like climate. How do we understand information at the scale computers can provide and process? What does it matter how computers store and process this data?

**Readings include:** *The Information* (James Gleick); “As We May Think” (Vannevar Bush); data journalism; “Culturomics”; Raw Data is an Oxymoron (ed. Gitelman);

**Examples to explore for this unit include:** Big Data Project on 1918 Flu; Human Computing in Baseball; Google N-grams

4. COMPUTERS ARE FUN!
Initially conceived as devices for work (and destruction), computers quite quickly became an area for creativity, interactivity and play. But computers have been blamed for violence, obesity, and social anxiety disorders. How do computers change the way we have fun?

**Readings and examples include:** *Hackers* (Steven Levy); “Spacewar” (Stewart Brand); *Computer Lib/Dream Machines* (Ted Nelson); *Reality is Broken* (Jane McGonigal)

**Examples to explore for this unit include:** the movie *Tron*; Minecraft; Mario 64; work by artists such as Cory Arcangel, Rafael Rozendaal and Jon Rafman