CSC300H1S: Computers and Society

University of Toronto
Spring, 2014
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Key Ideas

- Technical content operates in a non-technical context.
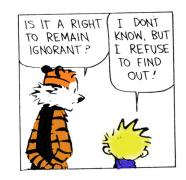- Social context is central to technology.

Not as Precise

- But arguably more important.
- Not helpful, responsible or necessary to dismiss it.

IS IT A RIGHT TO REMAIN IGNORANT?

I DON'T KNOW, BUT I REFUSE TO FIND OUT!

Opportunity

- Understanding and working with the social/non-CS context can make your work better.

This Course

- Give you a chance to recognize situations where social/non-CS issues arise.
- Help you see all sides of these issues.
- Help you use this understanding to make better work.

Ground Rules

Course Structure

- Flipped classroom
  - Prepare in advance
- Lots of reading and writing
- Class will not be an information dump
  - Exercises and discussion

Readings

- ~3 readings per week.
  - Available online (links, Piazza)
  - 50-100 pages total
- Some weeks there are videos and podcasts

Attendance

- Essential
- Will be creating a seating chart next week. Choose a seat and stick with it.
  - Necessary to evaluation participation.

Respect

- Discussion based
- Differing opinions
- Mutual

- When you speak, stand up and say your name.

Attention

- 8 hours of sleep

Syllabus

- Available at:
  http://www.drsusansim.org/teaching/csc300h/

Instructors

- Instructor: Susan Sim

- TAs
  - Milad Eftekhar
  - Gwydaff Garbutt
  - Alicia Grubb

  - Will be allocating by last name

Lectures

- Thursdays 6:00-9:00pm, BA1190

Office Hours

- Thursdays at 5pm
- Tuesdays at 9pm on Google Hangout/skype

Academic Integrity

- Please refer to the material provided by Office of Student Academic Integrity for details.
  - http://www.artsci.utoronto.ca/osai/students/learn-the-rules
- Avoid showing your own assignments to other students.
- Be sure to give full and generous credit by citing your sources.

Electronic Devices

- Please turn off cell phones.

- Please do not use your laptops for non-course related activities

- Twitter #csc300

Grading

Deliverable	Weight	Due Date
Quizzes	10%	Weekly
Panel	5%	Various Dates
Participation	10%	Throughout course
Census and reflection	5%	January 21, 22:00
Paper 1 Proposal	2%	January 27, 22:00
Paper 1	15%	February 11, 22:00
Paper 2 Proposal	3%	March 6, 22:00
Paper 2	20%	March 25, 22:00
Final Exam	30%	During Exam Period

Quizzes

- Every week at the start of lecture, there will be quiz
  - Based on the assigned readings
  - Time limit: 10 minutes

Class Participation

- ~20 minute "talk show" at the end of most classes.
- Students randomly chosen from the class.

Term Papers

- Paper 1:
  - Option 1: Topic relevant to course
  - Option 2: Critique an existing software system
- Paper 2/Project:
  - Option 1: Paper
  - if (P1 grade >= B+)
    - Youtube video or implementation project

- Proposals due 2-3 weeks in advance

Examinations

- 3 hours
  - Multiple choice and essays

Questions?

Questions Later

- Piazza
  - If you have a question, others likely will too
  - You can answer each other's questions
  - Counts for participation
- Me!
  - Include CSC300 in subject line
  - May redirect to piazza, if appropriate

Data Modelling

Why make models?

- A data model is how your software represents the world.
- A good model should leave out details.
  - A complete, faithful representation of the world is not possible and not useful.
- Rendered in source code and databases.

- All modelling is political.

Design Example: Person

- How to represent a person?
- Depends on the domain
  - Vital Statistics
  - School records
  - Genealogy

APPLICATION FORM - SEPTEMBER 2014
EXTENDED FRENCH – Grade 7

Local School by home address
_____
Office Use Only

☐ **NO** My child will continue in the English program

☐ **YES** I wish to apply for placement for my child in the Grade 7 Extended French program at _____ Public School *
*Placement for the Extended French program is determined by home address in the Extended French school attendance area (see attached pages)
If the number of applicants exceeds the spaces available, a lottery will be held at the Extended French school to determine placement. Classes with fewer than 25 students may not open.

PLEASE PRINT

Student's Name: _____ _____
Last   First

Date of Birth: _____ _____ _____ ☐ Male ☐ Female
Year Month Day

Present School: _____

Complete Mailing Address: ___ _____ _____
Street   Apt.

_____ _____
City   Postal Code

Name of Parent/Guardian: _____ _____
Last   First

Telephone: _____ _____
Home   Business

_____ _____
Date   Parent/Guardian Signature

The French as a Second Language Advisory Committee (FSLAC) is composed of parents whose children are in the Board's French Immersion or Extended French programs. The committee's purpose is to advise the Board on FSL matters.

☐ Please check here if you consent to the Board sharing your name and contact information with the FSLAC. The FSLAC is solely responsible for how this information is used or shared.
_____ (signature)

Deadline for application is January 30, 2014. Late applicants will be placed on a waiting list.

Application 105D 2014   Ontario Universities' Application Centre

Undergraduate Application for Canadian Citizens & Residents

> **Main**

You are not logged in.

Application Links
> Main
· Account
· Browse Programs

Help Links
· About 105D
· Application Information
· Offers of Admission
· OUAC and Privacy
· Applicant Responsibilities
· Contact Information
· Home

This application may be used to apply for admission to undergraduate study for entry points in 2014 only (January through September).

You should use this application if:
- You currently reside in Canada (Canadian citizens, permanent residents or those currently studying in Canada on a study permit or other visa) OR
- You are a Canadian citizen or a permanent resident living elsewhere (not in Canada) AND
- You are not currently attending an Ontario secondary school in a day program.

Only one application is permitted.
All application fees are non-refundable.

New applicant for 2014?
▶ LOGIN   ▶ CREATE ACCOUNT

You may not need to use this application if, at any time in the past, you have been a registered student or have registered and then withdrawn from one of the Ontario universities you wish to apply to. Please contact the Admissions Office at the applicable university for further instruction.

© OUAC 2004-2014   14/01/09 02:49PM EST

APPLICATION FOR MARRIAGE LICENSE, _____ **County, Texas**

Sec. 2.009 of the Texas Family Code requires the applicants for a marriage license to provide the information on this form, including their social security number. A county clerk may not issue a license unless all information is provided on this application.

Please PRINT your responses carefully and accurately. The information you provide on this application is used to create your marriage license.

MAN
First Name / Middle Int. / Last Name / Suffix
Date of Birth (mm/dd/year) / Age / Place of Birth (city) / County / State/Foreign Country
Social Security Number / Telephone Number / E-mail Address
Street Address (number & name) / City / State/Foreign Country / Zip Code
Mail Executed License to: (Street) / City / State/Foreign Country / Zip Code

I have not been divorced within the last 30 days. ☐ TRUE ☐ FALSE
I am not presently married and the other applicant is not presently married. ☐ TRUE ☐ FALSE
I am not presently delinquent in the payment of court-ordered child support. ☐ TRUE ☐ FALSE
☐ I wish to make a voluntary contribution of $5.00 to promote healthy early childhood by supporting the Texas Home Visitation Program administered by the Office of Early Childhood Coordination of the Health and Human Services.

The other applicant is not related to me as
- an ancestor or descendant, by blood or adoption;
- a brother or sister, of the whole or half blood or by adoption;
- a parent's brother or sister of the whole or half blood or by adoption;
- a son or daughter of a brother or sister of the whole or half blood or by adoption;
- a current or former stepchild or stepparent; or
- a son or daughter of a parent's brother or sister, of the whole or half blood or by adoption.
☐ TRUE ☐ FALSE

I solemnly swear (or affirm) that the information I have given in this application is correct. _____ Applicant Signature
WARNING: THE PENALTY FOR KNOWINGLY MAKING A FALSE STATEMENT CAN BE 2-10 YEARS IN PRISON AND A FINE OF UP TO $10,000. (HSC. SEC. 195.003)

WOMAN
First Name / Middle Int. / Last Name / Maiden Surname (if different)
Date of Birth (mm/dd/year) / Age / Place of Birth (city) / County / State/Foreign Country
Social Security Number / Telephone Number / E-mail Address
Street Address (number & name) / City / State/Foreign Country / Zip Code

I have not been divorced within the last 30 days. ☐ TRUE ☐ FALSE
I am not presently married and the other applicant is not presently married. ☐ TRUE ☐ FALSE
I am not presently delinquent in the payment of court-ordered child support. ☐ TRUE ☐ FALSE
☐ I wish to make a voluntary contribution of $5.00 to promote healthy early childhood by supporting the Texas Home Visitation Program administered by the Office of Early Childhood Coordination of the Health and Human Services.

I solemnly swear (or affirm) that the information I have given in this application is correct. _____ Applicant Signature
WARNING: THE PENALTY FOR KNOWINGLY MAKING A FALSE STATEMENT CAN BE 2-10 YEARS IN PRISON AND A FINE OF UP TO $10,000. (HSC. SEC. 195.003)

OFFICE USE ONLY:
Subscribed and sworn to before me, or I certify that the applicant did not appear personally but the prerequisites for the license have been fulfilled as prescribed by Section 2.007 of the Texas Family Code on _____, 20____ at ____ am/pm.
MAN IDENTIFICATION TYPE (ID & age) _____ County Clerk
WOMAN IDENTIFICATION TYPE (ID & age) _____ County, Texas
by _____ Deputy

Why does it matter?

- Models, by necessity, are selective
  - It matters to people what is included and excluded.
- Data models inscribe a process.
  - Pre-marital education in education grants privileges.
- With computerized systems, work-arounds are often not possible.
  - "The computer won't let me."
- Expedient design decisions should not exclude life decisions.

All modelling is political.

- What is political?
1. ~~Pertaining to government or state.~~
2. ~~Characteristic of politicians.~~
3. ~~Damaging to the government or politics.~~
4. ~~Involved in politics.~~
5. ~~Partisan or self-serving.~~
6. Pertaining to policy.
7. Exercise of power and influence over other's behaviour.

Long Form Census

Canadian Census

- We'll be using the Long Form Canadian Census as a running example in this course.
  - You'll be filling one out for your first assignment.
- Encompasses many of the issues that we are going to cover.

Background

- A census is an enumeration of the vital statistics of a population.
  - Vital - living
  - Statistics -from Latin for statisticum collegium ("council of state") or Italian for word statista ("statesman" or "politician")
    - Meaning the science of the state
- Emerged in the 17th century along with modern conceptions of the Nation State
  - Typical post-enlightenment project of counting everything, e.g. encyclopedia

Census in Canada

- From the earliest days, explorers and colonists were counted, but aboriginal peoples were not.
  - We have records from 1666
- First Canada-wide census was in 1825
  - Conducted every ten years until 1901
  - Every five years since

Short Form vs Long Form

- Short form census is sent to every household in to count population.
- Long form census is sent to 20% of the households.
- Selective sample does extremely detailed in-person interview.
- Participation is mandatory.
  - Until 2011

- Long form census was replaced with a voluntary National Household Survey (NHHS)
  - Questions the same as 2006 long form.
  - But participation not legally required.
  - Controversial. Starting to see implications now.

How to read an academic paper

Step 1. Meta-information

- What is the title?
- Who wrote it?
- When was it written?

2. High-level Pass

- Read introduction and conclusion
- Skim the remainder of the paper
- Use a dictionary, if necessary
  - Maintain a glossary

3. Detailed Pass

- Read the entire paper in detail
- Make notes in the margins
- Highlight passages

4. Reflect and Summarize

- What factual information do you want to retain?
- What have you learned?
- How does it relate to what you already know or have read?
- Critique the work- what facts or doubts conflict?

- Make notes of these reflections.
- Add to this when you discuss it.

Panel:
Is software special?

Panel

- Do computers have special ability to organize people into categories? Is this a good or bad thing?
  - Compare with paper files, geography, laws, and other technologies.

- Take a minute to think in silence.
  - Have you been categorized? Effectively or ineffectively?
  - What, if anything, can be done to minimize the harm of residual categories? While maximizing the power of enumeration?
- Discuss with your neighbours.
- Take 5-7 volunteers for panel (today only)