# CS 4001: Computing, Society & Professionalism



Munmun De Choudhury | Assistant Professor | School of Interactive Computing

# Class 1: Welcome and Overview January 10, 2017

#### Introduction

- Instructor
  - Munmun De Choudhury (<u>www.munmund.net</u>)
  - munmund@gatech.edu
  - Office: TSRB 341
  - Office hours: 11am-12noon Fridays
- Teaching Assistant
  - Sarmistha Dutta
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  - Office: TSRB 341 Lab Area
  - Office Hours: By appointment

#### Class Resources

- Course webpage:
  <a href="http://www.munmund.net/">http://www.munmund.net/</a>
  <a href="http://www.munmund.net/">CS4001\_Spring2017.html</a>
- Syllabus:
  <a href="http://www.munmund.net/">http://www.munmund.net/</a>
  <a href="http://www.munmund.net/">CS4001</a> Spring2017.html
- Class Piazza link: <a href="https://piazza.com/class/ixrk1gy0qmd5ad">https://piazza.com/class/ixrk1gy0qmd5ad</a>
- TSquare for announcements and homework submissions

### Learning Objectives

- Ethics: What do "right" and "wrong" mean anyway? We'll learn about several philosophical approaches to ethics including utilitiarianism, social contract theory, and virtue ethics. The goal is to be able to address ethical dilemmas with reasoned arguments, grounded in a combination of these ethical theories.
- Professional Ethics: What special responsibilities do we have as computing professionals? What do the Software Engineering Code of Ethics and ACM Code of Ethics say, and how can we use these in our daily practice?
- Computing and Society: In what ways does computer technology impact society? We'll talk about a host of issues including privacy, intellectual property, and freedom of speech.
- Argumentation: How do you construct a well-reasoned argument?

#### Required Texts

- Ethics for the Information Age\*, Seventh Edition, by Michael Quinn
- Writing Arguments: A Rhetoric with Readings\*, Concise Seventh Edition (2016) by John D. Ramage, John C. Bean, and June Johnson.
- Visual & Statistical Thinking: Displays of Evidence for Decision Making\* by Edward R. Tufte. Graphics Press, 1997.
- Articles on electronic reserve.
- Articles available online.

\* (You may rent an electronic copy rather than buying it.)

### Assignments and Grading

- **尽** Class Attendance 10%
- ✓ Class Participation 10% (Contributions to the class Piazza discussions count towards class participation)
- Homeworks 20% (Term paper proposal and outline count as homework assignments)
  - 8 homeworks due between Jan 24 and Apr 11
- Midterm 15% (Mar 7)
- Term Paper 25%
- Final Exam 20% (May 2-4)

### Late Policy

- Students need to submit all of their materials on or before the deadline to qualify for 100% credit.
- 24 hours delay will result in 25% penalty; 48 hours late submissions will incur 50% penalty.
- Materials submitted past 48 hours will not be accepted, and will entered a zero grade.

#### Class Attendance

- Class attendance is required. Please remember to sign the attendance sheet each class.
- Please do not sign the attendance sheet if you are more than 15 minutes late to class.
- If you need to miss class for a legitimate reason, please send email to the instructor and TA, preferably before class.
- You may miss up to two classes without it affecting your grade.

Background + One topic or issue about computing and society that interests or concerns you, and why

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#### Student Introductions

### Significance

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What is ethics?

Out in the desert you are driving. You can see in all directions for miles. No one else is around. Do you stop at a stop sign? Why or why not?

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### The Stop Sign



### Difference between legal and ethical

### Difference between legal and ethical

- Law controls what people can and cannot do, while ethics are moral standards that govern what people should or should not do
- In some instances, legal regulations prohibit people from carrying out certain tasks, such as administering life-saving support, that are considered morally permissible actions.

### Difference between legal and ethical

- Some laws generate few negative responses, as their intent to protect and promote the safety and well-being of the public is virtually indisputable.
- Other laws, however, generate disagreement among citizens, particularly over sensitive issues such as end-of-life care and medical treatment for certain conditions.
- While legal and moral issues sometimes coexist in harmony, they can also raise questions and generate conflicting opinions.

#### **Ethical Robot**

Imagine that you work for a computer company. You have just been assigned to a team which is charged with coming up with an approach for building a robot capable of making ethical or moral decisions. Where would you start? How would you proceed? Is such a task one that you believe is even possible?

#### **Ethical Robot**

- Do we need robots capable of making ethical or moral decisions? When? For what?
- Are robots the kinds of entities capable of making ethical or moral decisions?
- Whose morality or what morality should be implemented?

#### Two Case Examples

- The Facebook Emotion Contagion Study
- Free speech and online harassment

## Facebook Tinkers With Users' Emotions in News Feed Experiment, Stirring Outcry

By VINDU GOEL JUNE 29, 2014



Facebook revealed that it had altered the news feeds of over half a million users in its study.

Karen Bleier/Agence France-Presse — Getty Images

To <u>Facebook</u>, we are all lab rats.

Facebook routinely adjusts its users' news feeds — testing out the number of ads they see or the size of photos that appear — often without their knowledge. It is all for the purpose, the company says, of creating a more alluring and useful product.

But last week, Facebook revealed that it had manipulated the news feeds of over half a million randomly selected users to change the number of positive and negative posts they saw. It was part of a psychological study to examine how emotions can be spread on social media.

#### **Next Class**

- Materials and readings on the class website
- Longer than normal reading, but interesting
- Try to identify three things:
  - People: who was involved? what did they do? what might they've done differently?
  - Policies: government; corporate