# Social Computing Capstone

CSE 481p | Winter 2022

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# Schedule for today's class

- Introduction to social computing (20 min)
- Go around and do intros! (everyone 1 min) (~25 min)
- Overview of syllabus and course calendar (20 min)
- Socializing time (15 min)

# What is social computing?

It is the study of how technology shapes human social interaction (and society at large),

how humans repurpose and shape technology for social interaction,

emergent effects and coevolution from the ***combination*** of the two,

and the design of new technology that mediates human social interaction

computer science  design  social science

# Social Computing Systems

work, collaboration, production, productivity

social support, leisure, fun, interpersonal communication

Venmo

Github

Wikipedia

Youtube

Instagram

ebay

Stack Overflow

Twitter

Twitch

TikTok

AirBnB

Google Docs

Quora

WeChat

WhatsApp

Minecraft

Amazon

Yelp

Reddit

Pokemon Go

Slack

Piazza/Ed

Google Calendar

Discord

iMessage

email

Snapchat

Google Sheets

Canvas

Zoom

Facebook

Uber

Figma

Notion

Tinder

blockchain

GroupMe

# Social problems => social computing problems

1) How to fix social media
    a. harassment, bullying
    b. misinformation, conspiracies
    c. hate speech, trolling
    d. polarization, addiction, scams, etc.

2) How to not curl into an anxious ball getting through your email, missed Slack messages, Zoom meetings, browser tabs, etc.

3) How to have difficult conversations with each other online that don’t devolve into shouting matches

(+) How to...make friends, learn new skills, fall in love, find employment, get support, play together, make things together, etc.

As designers and builders of social computing systems, can we imagine a better future than this?

computer science

design

social science

# What is *social computing* design?

Increasingly, we are fashioning social environments **online**.

Social computing design asks how to fashion those environments to support the participants in achieving their goals.

How do we cross the chasm between the social interactions that the group wants to support, and the computer interactions that we have at our disposal or could invent? [Ackerman 2000]

Ackerman, Mark S. "The intellectual challenge of CSCW: The gap between social requirements and technical feasibility." *Human–Computer Interaction* 15.2-3 (2000): 179-203.

*sociotechnical*:

the holistic, interconnected contribution of technology and the social systems that operate and interact with it

**All social computing systems are sociotechnical. You cannot divorce the two.**

# *social norms:*

The unwritten rules of beliefs, attitudes, and behaviors that are considered acceptable in a particular social group or culture. Social norms are the accepted standards of behavior of social groups.

As social beings online, our behavior is regulated both by social norms and by technology.

Good design takes into account *both*. You can write code to influence behavior…up to a point. You can also do things to establish norms that then influence behavior.

# beware of *technosolutionism*

There is not an easy fix to big complex social problems through technology alone.

Social media platforms could be designed to be better for society... but their problems are also often symptoms of other deeper issues that changing the tech won't 100% solve.

# And yet there ARE right and wrong ways to design social spaces

We cannot force good behavior or exclude the possibility of bad behavior. That's what makes social computing so hard!

But our design—the way our system empowers people to establish norms and enforce them—holds substantial responsibility for the social outcome.

Your job in this class is to put yourself into that role of a designer of a social space to make something new. Get used to making tough tradeoffs and clarifying your values! Our technology is not neutral [Winner 1980].

Winner, Langdon. "Do artifacts have politics?." *Daedalus* (1980): 121-136.

# Why is social computing design hard?

The Daily Dot

Culture

## The demise of a social media platform: Tracking LiveJournal's decline

Aja Romano—

VANITY FAIR

HIVE

From the Magazine

## "MEN ARE SCUM": INSIDE FACEBOOK'S WAR ON HATE SPEECH

The company blew it on privacy and fake news. Can it do better against trolls and racists? An


Snapchat

## Snapchat update: mo 800,000 angry users s petition to change rec

# Why is social computing design hard?

The sum is not just the addition of the parts.

Never just paste social bits into another application. It’s not about whether you have points, or friend/follow models, or real names or pseudonyms. At least not directly.

It’s like saying your bridge will work if you have strong ropes. The local materials matter, but if the global design stinks, even the best materials won’t save you.

# Why is social computing design hard?

How do you design a social computing systems that helps promote the behaviors that the group wants to see in the system?

What about a design makes people...
Feel safe?
Post funny memes?
Engage in thoughtful discussion?

# Why is social computing design a serious responsibility?

These systems have the opportunity to help us create a more {thoughtful, deliberative, fun, emotionally connected, empathic, just} society. However, they can also have the opposite effect.

What power do you have as a creator, and what responsibility do you have when creating? How do we draw on positive opportunities without unleashing Pandora's Box?

# Intros!

Let’s have a ~5 minute bathroom break. For those of you who didn’t get to making an intro slide - add it in right now!

Follow along at https://tinyurl.com/socialcapstone

# Course Overview

# This class is a capstone. What does that mean?

We'll spend a little bit of time every week talking about social computing topics. But I'm not going to lecture at you much.

Instead, this class is going to be oriented around *doing*. The main work involved in this class is a major capstone project where you'll work in groups to apply the skills you've gained in prior courses towards designing and implementing a social computing system!

Along the way, you'll learn and apply some software engineering, project management, UX research and design, and presentation skills.

# By the end of this class, you will...

- understand the major issues and societal debates facing social computing systems today and the state of the art in how to address them understand
- what are important considerations for designing a social computing system
- be able to critically evaluate social computing systems you encounter in the world

- know how to use an iterative and human-centered design workflow to design and build a complex user-facing social system
- understand and be able to select and apply appropriate user research and testing methods
- apply the computer science skills you have gained in other courses towards engineering a complete project, including code and design specifications and feasibility analysis
- practice working with other students in a team and gain strategies for successful teamwork and project management

# We expect from you…

(This is me influencing the social norms of this class!)

Your involvement in creating an engaged and positive class environment. That includes your active and enthusiastic participation in class discussions, presentations, and feedback. And it includes assuming good intentions to foster a welcoming space during discussion and sharing.

Your equal contribution to your team's workload, openness to communication, and willingness to be a team player. We will have regular check-ins with your team to set team expectations.

Timely communication with the staff on any issues that may crop up, absences, illnesses, and other extenuating circumstances. We're here to help you, and we will work with you and your situation, whatever it may be.

# Policy on missed class

We understand you may get sick. Please stay home if that is the case. I will be sharing my screen over Zoom in every class so folks can follow along at home if they've received permission from us. I'll also record these and share slides from class.
It will not be as good of an experience though since lecture is only a tiny part of the class.

Those who miss class are still expected to make up whatever they missed. For instance, if there was group work happening, you should make up for this by doing extra work for your group outside of class.

# Course Structure

Meetings: TTh 10-11:20 in Loew Hall (this week only on Zoom)
Class will involve a mix of lecture, discussion of readings and assignments, class activities, guest speakers, group work time, group presentations.

No exam or tests of any kind.

5 individual assignments (mostly short reflections). You will post these on Canvas Discussions and read and comment on each other's posts.

1-2 readings per class (mostly news articles/opinion pieces). We will read them and collaboratively add comments in the margins, and then discuss them in class.

9 group assignments related to the capstone project, going from idea all the way to a working digital prototype, launch website, and video demo.

# Social Computing Systems used in this class

Canvas - where you'll post reflections and where I'll occasionally post Canvas announcements

Slack - most communication with us will happen here. Feel free to use this space for your group as well.

hypothes.is - for comments on readings in the margins. We'll install this together in a future class (browser plugin)

Github - where your group will collaborate on code and you'll keep track of deliverables

Just for classes this week - Zoom, Wonder, Miro...

# Grading

10%  - Attendance and participation

5%  - Annotate readings before class with comments

13%  - 5 individual reflection assignments
3%, 2.5%, 2.5%, 2.5%, 2.5%

72%  - 9 group assignments for the capstone
- 5%: user research report
- 3%: pitch presentation
- 10%: low fidelity prototype
- 10%: code and design specification
- 3%: midterm presentation
- 9%: user testing
- 20%: digital prototype
- 8%: video demo
- 4%: website

For each group assignment you will also turn in an individual contribution statement.

# Capstone Project

Groups of 3-4 (preferably 4): we will help facilitate group formation

Your goal: design, build, launch, and test an idea for the design of a social computing system

This can be a whole new way of doing a social activity (building a system for performing a social activity from the ground up) or a change to an existing social system (Slack but with a bot that pairs up team members to help them get to know each other).

You can choose to use any (user-facing) technology you've learned in a prior class - web dev, app dev, machine learning, NLP, vision, visualization, graphics, VR/AR, haptics. You can stretch yourself a little here but do NOT take on a technology you know nothing about, or you will be in a lot of pain later in the class...

# Social Computing topics

Still somewhat in flux, but broadly broken up into three sections

**Concepts and Overview**
Today's intro
Landscape of social computing systems
Why do people use them?
What's broken about them?

**Issues with Social Computing Systems**
Engagement and Speed
Social Comparison
Quantification and Monetization
Other People (Armed with Tech)
"Democratization"
Being On All the Time

**Social Computing Systems Today and Tomorrow**
Commercial Content Moderation
Communities and Norms
Public Interest Technology
Ownership
AIs in Social Environments
Social Media and Democracy

# For Thursday:

Assignment A1: Pitch 3 project ideas will be due.

Assignment spec is on Canvas and on the website.

Think about your goals for this class and the topics within social computing that interest you to come up with three project ideas. After coming up with three project ideas, create a Google slides presentation to present your three project ideas (submit this link on Canvas by 9:30 AM Thurs).

We will be placing all the slides into one big slideshow, and on Thursday, you will each pitch your project ideas to the class for 1 minute.

Remember that the main purpose of this assignment is to **help you find group members that are interested in the same area**. So don't worry if your ideas are still fuzzy. Think about topics that you are excited about and pitch to your classmates to get them excited about it as well!

# Socializing Time

To help facilitate you all forming groups despite being remote this week, we're going to do a social icebreaking activity.

We could have done this in Zoom but instead we're going to try out a relatively new social computing system called Wonder to see how that changes our social behavior (my first time using this!): https://tinyurl.com/wonderspace (password **uwcse**)

Find another person or a group of 3. Go around, introduce yourselves, and tell each other **your first internet memory**. Once you all are done, if there's time left over, break up your group and join another one, and do it again!