

CS 6474/CS4803

Social Computing:

Introduction

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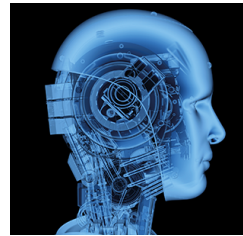
A Little Bit About Myself...

Social Dynamics and WellBeing Lab

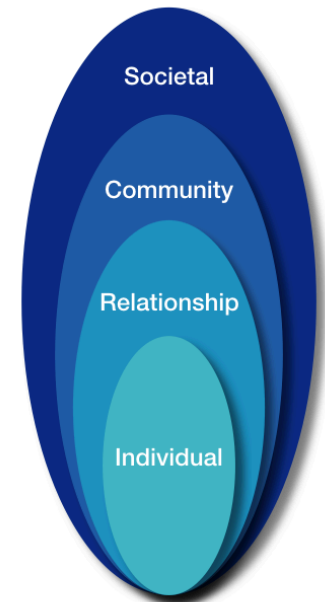
Computational and AI artifacts for social good
Understand and improve wellbeing



Social Media



Human/Stakeholder-Centered
AI + Interdisciplinary



Theory Centered

Part I: Course Structure and Information

Learning Objectives

- Course Website:
http://www.munmund.net/CS6474_Spring2023.html



- **Goal: How and why social computing works?**
- **Takeaways at the end of the course**

To discuss

Theoretical

Methodological

Technological

Underpinnings
of

Social
Computing

through
reviewing
various
application
areas

and raise some
key research
questions

Grading

- Reflection on Assigned Class Readings (any/best 10) - 25% (2.5% each)
 - : Piazza link for submission of reading reflections
 - : Piazza for asynchronous discussion
- Class Attendance/Participation - 10%
- Assignment I - 12%
- Assignment II - 18%
- Term Project - 35%
 - : Project Proposal - 8%
 - : Project Proposal Presentations - 5%
 - : Final Project Presentation - 5%
 - : Final Report - 17%

Required Skills

- *Technical*: any object-oriented/scripting language like Python; some frontend development skills/web programming skills (ajax, javascript, php) if your project is about building a social tool
- *Statistics/machine learning*: preliminary knowledge of working with some data and using some analytical software (e.g., Python, R)
- *Reading/writing*: approximately two papers assigned for each class (four in a week); significant weightage on weekly class readings, mid-term and final term project report

Important notes about skills

- No programming will be taught – you are required to have fairly good working knowledge of data analytics
- Some review of data analytics during the discussion of various readings, as appropriate

Course Materials/Logistics

Participation in Class Readings

- Write short blurbs on Piazza (under “reflections”) about the readings assigned for a particular class
 - Blurbs can range from 300-600 words in length
- Sample reflections available on the course website
- Any/best 10 reflections out of 22 topical classes
 - Starts from next week (Wednesday, Jan 17)
- Piazza link: <https://piazza.com/gatech/spring2023/cs6474a>

Assignment I

- **Due: March 15, 2023**
- Questions will focus on the topics of the reading materials covered until the point the assignment is released.
- ***Design focused questions***
- What to hand in?
 - A report + screenshots of the
 - Submission on Canvas

Assignment II

- **Due: April 12, 2023**
- Questions will focus on the topics of the reading materials covered until the point the assignment is released.
- ***Data analytic questions***
- What to hand in?
 - A report + code in a zipped folder
 - Submission on Canvas

Term Project

- Project proposal due: February 15, 2023
- Proposal presentations: February 13, 15, 2023
- Final presentations: April 19, 24, 2023
- Final project report due: April 28, 2023
- Goals:
 - Group project: 3-4 people
 - You are free to pick your group – use Piazza to know and find like-interested classmates
 - Need to discuss your project idea with instructor/TA early on in the course, before proposals are due

Term Project

- Group effort
- Individual assessment – clearly articulate individual goals and contributions in the project proposal
 - In the final report, revisit the above list to indicate what you have done
- Peer assessment – indicate how each of your groupmate accomplished what they were supposed to do
 - Only required in the final report
 - Anonymous to teammates

Late Policy

- Reading reflections are due *at 11:59pm* on the **day before** the relevant class meeting.
- Assignments are due *at 11:59pm* on the date listed for that assignment.
- Term project report is due at 11:59pm on the date listed.
- Some work (only assignments, but not the project deliverables or reading reflections) submitted more than 15 minutes after the due time will be assessed a 25% penalty.
- Each additional 24 hours of lateness will result in an additional 25% being taken off the grade for that assignment. After 2 days, the assignment will not be accepted and a grade of 0% will be entered.

English as Second Language

- If English is not your first language, you may request to not be graded on your writing for a particular individual assignment.
 - This means you won't be penalized for bad writing, but you also won't get credit for good writing. To take advantage of this option, you must mark "ESL" (English as a Second Language) on the first page of your assignment/paper.
- This option is not available for the term project as it is a group assignment.

Academic Integrity

- This class abides by the Georgia Tech Honor Code.
- All assigned work is expected to be individual, except where explicitly indicated otherwise.
- You are encouraged to discuss the assignments with your classmates; however, what you hand in should be your own work.
 - Okay to use open-source software (no need to reinvent the wheel), however do acknowledge!
 - Copying/reusing code from your classmates and friends are not allowed; strict action will be taken if similarities are discovered
 - Copying (textual) content for your assignments and project from other published work (without citing them) is also not allowed, and is considered plagiarism

Help and Resources

- Office hours: Virtual/Link on Canvas
- Email: munmund@gatech.edu

- Teaching Assistant: Vedant Das Swain
- Office hours: Virtual/By appointment
- Email: vedantswain@gatech.edu
- Email announcements will be made over the course page on Canvas

If you need to reach me or the TA...

- Questions should be directed via email to me or TA for fastest response
- For questions/concerns related to the assignments or project deliverables, reach us at least 2 days (48 hours) before the due date.
- Questions within 2 days (48 hours) of the due date should not be expected to be answered on time.

Part II: Defining “Social Computing” / Background

Quoting Wikipedia:

“Social computing is an area of computer science that is concerned with the intersection of social behavior and computational systems. It is based on creating or recreating social conventions and social contexts through the use of software and technology.”

Why Social Computing?

Interact

- Expressions
- Gestures
- Spoken Word
- Written Word



Sensitive to the people around

Humans are Social

Make decisions shaped by social context

- Choosing a restaurant
- Crossing the street

Doing what others do and following what others say

Theoretical and Infrastructure Basis of Social Computing

Major application areas of social computing

Class Activity

A) An example of a social computing system
(that exists online)

Why?

B) An example of a non-social computing
system (that exists online)

Why?

Social Computing Tools

BLOG

WIKI

Social Networks

RSS

Social
Bookmarking

VOIP

Others

- Internet Forums
- Multimedia Sharing
- Virtual Reality

people **creating**
(blogs, user-generated content and podcasts)



people **connecting**
(social networks and virtual worlds)



people **collaborating**
(wikis and open source)



people **reacting**
(to each other: forums, ratings and reviews)



people **organizing content**
(tags)



people **accelerating consumption**
(RSS and widgets)



A Brief Historical Analogy

ARPANET and groupware

Early efforts of social computing

Part III: Introductions

closest social computing project, if any
what you want to learn from the class