

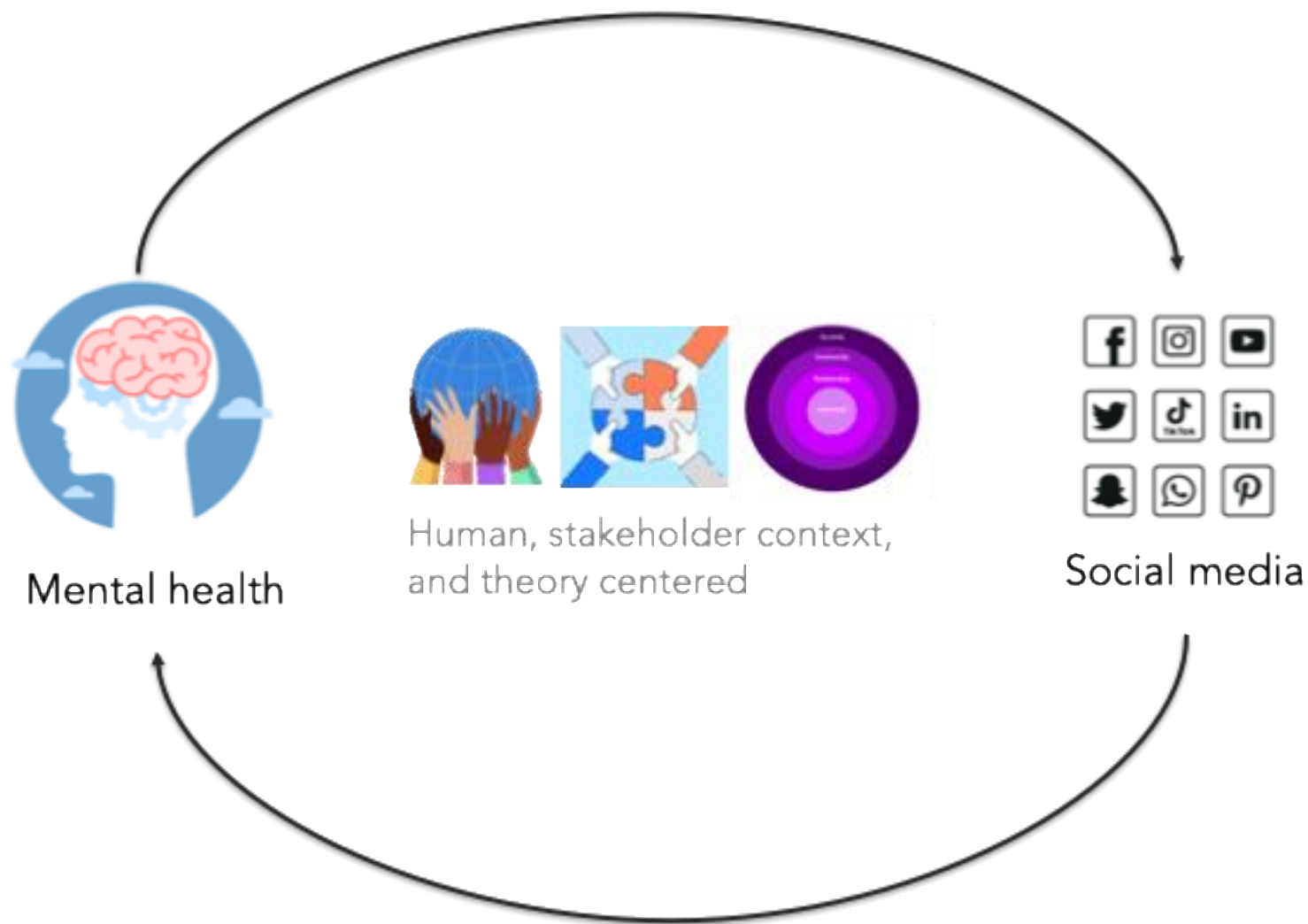
# CS 6474/CS4803

## Social Computing: Introduction

*Munmun De Choudhury*

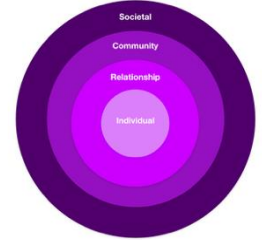
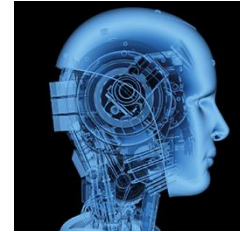
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Week 1 | January 12, 2026



# SocWeB Laboratory

How do online technologies reflect and shape our well-being?



Human, stakeholder context, and theory centered



Children's  
Healthcare of Atlanta



Georgia Tech  
Institute for Data  
Engineering and Science



Georgia Tech  
Parker H. Petit Institute for  
Bioengineering and Bioscience



Northwell  
Health



THE  
HARVARD  
MEDICAL SCHOOL



UNIVERSITY of  
ROCHESTER  
MEDICAL CENTER



SCHOOL OF  
MEDICINE



Microsoft  
Research



NAMI  
National Alliance on Mental Illness



UPMC  
University of Pittsburgh  
Medical Center



EVERYTOWN  
FOR GUN SAFETY



THE UNIVERSITY  
of  
WISCONSIN  
MADISON



Befrienders  
Worldwide  
Global Suicide Prevention



MHA  
Mental Health America

Interdisciplinary, collaborative approach

# Part I: Course Structure and Information

# Course Overview

- Course Website:  
[http://www.munmund.net/CS6474\\_Spring2026.html](http://www.munmund.net/CS6474_Spring2026.html)



- Social computing as a study of online social systems as **socio-technical ecosystems**
- Focus on human behavior, platforms, algorithms, and data in the wild
- **Goal:** How and why social computing works or does not work?

# Learning Objectives

- Course Website:  
[http://www.munmund.net/CS6474\\_Spring2026.html](http://www.munmund.net/CS6474_Spring2026.html)



- **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

- [Individual] Assignments on Class Readings (due anytime after the particular class till the last class of instructional period) - 35%
  - : (Sociological Foundations) Class Reading Assignment 1 - 6%
  - : (Social Computing Theories) Class Reading Assignment 2 - 6%
  - : (Bridging Offline and Online) Class Reading Assignment 3 - 4%
  - : (Benefits of Social Comp Systems) Class Reading Assignment 4 - 4%
  - : (Problems of Social Comp Systems) Class Reading Assignment 5 - 7%
  - : (Tackling Harms) Class Reading Assignment 6 - 4%
  - : (Methodological Pitfalls and Solutions) Class Reading Assignment 7 - 4%
- [Individual] Homeworks - 30%
  - : Homework I - 5%
  - : Homework II - 10%
  - : Homework III - 15%
- [Group] Term Project - 35%
  - : Project Proposal - 7%
  - : Project Proposal Presentation - 3%
  - : Final Project Presentation and Oral Exam (final exam week) - 7%
  - : Final Report (due during the final exam week) - 18%

# Grading Scale

- Final course grades will follow a standard scale:
  - A = 90-100%,
  - B = 80-89%,
  - C = 70-79%,
  - D = 60-69%, and
  - F = below 60%

# Required Skills

- Programming proficiency in Python
- Data analysis with pandas, NumPy, Jupyter
- Familiarity with ML / NLP libraries (e.g., scikit-learn, PyTorch, Hugging Face)
- Experience with text, network, or behavioral data
- Basic exposure to web or system development (e.g., APIs, databases, front-end frameworks)
- Willingness to learn new tools independently

# Course Materials/Logistics

# Class Readings

- Weekly readings across 7 thematic clusters
- In-class discussion and activities grounded in readings
- Reading assignments tied to the assigned readings
- Prepare to connect the reading related assignments to broader social computing concepts

# Homework I

- Questions will focus on your experience of exploring your own social media behavior(s).
- *Insight focused questions*
- What to hand in?
  - A report
  - Submission on Canvas

# Homework II

- Questions will focus on design related aspects of social computing systems.
- ***Design focused questions***
- What to hand in?
  - A report + screenshots of the design
  - Submission on Canvas

# Homework III

- Questions will focus on empirical analysis of social computing platform data.
- ***Data analytic questions***
- What to hand in?
  - A report + code in a zipped folder/notebook
  - Submission on Canvas

# Term Project

- Goals:
  - Group project: 3-5 people | No teams under the size of 3 allowed
  - You are free to pick your group
  - 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
- FINAL DELIVERABLE: Report + an oral exam during the finals week.

# Late Policy

- Class Reading Assignments are all due *by 11:59pm* on the last day of instruction for this course (Apr 27).
  - No late policy
- Term project proposal and report are due at 11:59pm on the date listed. Presentations are due at the time scheduled.
  - No late policy
- Homeworks (3) 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.

# Help and Resources

- Office hours: By Appointment; Virtual/Link on Canvas
- Email: [munmund@gatech.edu](mailto:munmund@gatech.edu)
- Teaching Assistants:
  - Shravika Mittal ([smittal87@gatech.edu](mailto:smittal87@gatech.edu))
  - Johnny Nguyen ([johnny.nguyen@gatech.edu](mailto:johnny.nguyen@gatech.edu))
- Office hours: Virtual/By appointment
- 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, homeworks, 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 by the deadline.

# AI Policy

- AI tools may be used as assistive aids, not as substitutes for thinking or writing
- Permitted uses: debugging, editing/polishing writing, proofreading
- Not permitted: submitting AI-generated work, ideas, or code as your own
- Transparency required: disclose AI use when relevant
- You are responsible for accuracy, originality, and ethics
- **Violation of the policy may be considered as academic misconduct**

# Academic Integrity and GT Honor Code

- Uphold the highest standards of academic honesty
- Submit only your own original work
- Properly cite all sources and collaborators
- Unauthorized collaboration or misrepresentation is not permitted
- Violations will be handled per Georgia Tech policy

# Part II: Defining “Social Computing” / Background

# 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