

Class Introduction

Social Computing

Social Computing Course

- **Location and Time**
 - BL25 110 T-Th 10:15-11:35 am
- **Instructor:**
 - Prof. Tomek Strzalkowski
- **Class Website**
 - <http://www.ils.albany.edu/teaching/social-computing>
- **Class wiki**
 - <http://csi660soco.pbworks.com/w/page/15032142/FrontPage>

Social Computing Course

- **Contact Information**
 - tomek@albany.edu
- **Assistant:** Gregorios Katsios
 - gkatsios@albany.edu

Contact

- **Office Hours: Social Science**
 - TS: 12 noon- 2 pm Tuesdays (SS-262)
 - GK: TBD (SS-261)
 - By appointment only
- Preferred contact method: Email
- Or in person during office hours
- If you need to meet at any other time, please make an appointment via email first!

What is it all about?

- *Can a computer figure out who is a leader of a group of people from their conversation?*
- *Can a computer detect when a person has changed their mind about something even when they would not openly admit it?*
- *What can a computer find out about the real person behind an avatar their in an online game?*
- *Can we build an artificial agent that would hold its own in an online conversation?*
- *Can an artificial agent influence a person's behavior?*

What will you learn?

- Introduction to the field of social computing
- Become familiar with the state-of-the-art research in big data and social computing
- Achieve a comfortable level of thinking about concepts like human behavior and attitudes and modeling them in computational algorithms

Why is it relevant now?

- Big data and Data Science are the buzz words of today
- And so are Deep Learning and Deep AI
- But, need to have a careful approach towards data
- And also towards what machines actually can do

Reading Materials

- No textbook
- No exams

- Lecture slides
- Assigned readings
 - Papers that touch upon and expand on the topics covered in lectures

Course Grading Policy

- 20% Reading responses
- 20% Presentation and discussion lead
- 20% Class participation
- 30% Homeworks
- 10% In-class mini-quizzes

Reading Responses (20%)

- By 11:59 pm on Tuesday, students will be required to send reading responses to the instructor for the paper assigned in the prior week.
- A template for filling out response will be provided
- Responses will be evaluated on the quality of insights, but are informal and will not be evaluated for grammar or formal writing style.

Presentation/Discussion Lead (20%)

- Each student will be assigned to one of the readings after the first day of class.
- That student will prepare slides on the reading and lead an in-class discussion on the reading assignment.
- Slides need to be sent to TA and instructor by 11:59 pm on Wednesday before class

Presentation/Discussion Lead (20%)

- For the week you present and lead a discussion, you do not need to complete a reading response.
- The presentation should be organized into the sections.

Presentation content

- What is the main problem or issue that the authors are addressing?
- Provide an overview of the authors' approach/argument and conclusions.
 - This is the core content
- What are the main strengths and/or weaknesses of the approach?
- Provide a list of questions regarding the paper for discussion during class.

Here is a possible structure

- Motivation & Data
- Problem definition/scope
- Previous efforts
- Authors' approach
- Results as reported
- Contribution vs. previous efforts
- Questions for discussion

Class Participation (20%)

- Class participation will be evaluated on the basis of student involvement during discussions and in lectures
- Being absent from class more than 2 times without explanation will result in loss of class participation grade

Homeworks (30%)

- Class project structured as three homework assignments
- Approximately 1 month to complete each assignment
- Will require programming
 - Can choose language, Java or Python preferred
- Each subsequent homework builds upon previous one

Homeworks (30%)

- Sample data and code for each assignment will be provided

Quizzes (10%)

- Five mini-quizzes spread through the semester
- Check course schedule for exact dates
- Multiple choice questions
- To be answered in class
- May require some basic calculation
- 20-30 minutes in duration

Late Submission Policy

- **Submissions will not be accepted late, no exceptions.**
- Partial credit will be given for submissions that are turned in on time, but incomplete; so turn in whatever you have by the deadline.

Academic Integrity

- **Cheating/copying/plagiarism of any kind will result in loss of grade for all parties involved.**

Schedule and Topics

DATE	TOPIC	READING/ASSIGNMENTS	SPEAKER
1/23	<i>Lecture 1: Introduction to Social Computing</i>	Paper 1 assigned	TS
1/25	<i>Lecture 2: Introduction to NLP</i>	Paper 2 assigned	TS
1/30	<i>Lecture 3: Research Methods Primer online</i>	Paper 1 responses due	TS
2/1	Class discussion: Paper 1	HW 1 assigned	Student
2/6	<i>Lecture 4: AI/Machine Learning Primer</i> Quiz 1	Paper 3 assigned Paper 2 responses due	TS
2/8	Class discussion: Paper 2		Student
2/13	<i>Lecture 5: AI/Machine Learning Primer, cont.</i>	Paper 3 responses due	TS
2/15	Class discussion: Paper 3		Student
2/20	<i>Lecture 6: Sentiment and Belief Extraction – Part 1</i>		TS
2/22	<i>Lecture 6: Sentiment and Belief Extraction – Part 1, cont.</i>	HW 2 assigned	TS
2/27	<i>Lecture 7: Sentiment and Belief Extraction – Part 2</i>	Paper 4 assigned	TS
3/1	Class discussion HW1 results	HW 1 due	Students

Schedule and Topics

3/6	<i>Lecture 8: Learning Human Behavior from Data 1 (sociolinguistic behaviors)</i> Quiz 2	Paper 4 responses due	TS
3/8	Class discussion: Paper 4		Student
3/13	spring break, no class		
3/15	spring break, no class		
3/20	<i>Lecture 9: Learning Human Behavior from data – Part 2 (Complex phenomena)</i>	Paper 5 assigned	TS
3/22	Class discussion: HW3 proposals	HW3 final proposals due 3/24	Students
3/27	<i>Lecture 10: Learning Human Behavior from Data, Part 3 (MMORGs)</i> Quiz 3	Paper 6 assigned Paper 5 responses due	TS
3/29	Class discussion: Paper 5	HW 2 due	Student

Schedule and Topics

4/3	<i>Lecture 11: Learning Human Behavior from Data – Language and Beyond – Part 4 (Social Networks and SNA)</i>	Paper 7 assigned Paper 6 responses due	TS
4/5	Class discussion: Paper 6		Student
4/10	<i>Lecture 12: Learning Human Behavior from Data – Language and Beyond – Part 4 (Social Networks and SNA contd)</i>	Paper 8 assigned Paper 7 responses due	TS
4/12	Class discussion: HW3 progress reports		Students
4/17	<i>Lecture 13: Affecting Human Behavior – Persuasion, campaigns, behavior change</i>	Paper 8 responses due	TS
4/19	Class discussion: Paper 7		Student
4/24	<i>Lecture 14: Guest lecture: Gaining and losing influence online</i>		Arun Sharma
4/26	Class discussion: Paper 8		Student
5/1	Class discussion: HW3 final presentations, part 1	HW 3 due 4/30 11:59 PM	Students
5/3	Class discussion: HW3 final presentations, part 2		Students
5/8	no class		

Assigned Reading: Paper 1

CRITICAL QUESTIONS FOR BIG DATA By danah boyd & Kate Crawford

- Responses due 11:59 pm, January 30th, 2018
- Slides due 11:59 pm, January 31st, 2018

Signing up for presentation slots

- Send email to: tomek@albany.edu
- Select exactly 3 dates from list of presentation dates
- Order them in your order of preference
- First-come first-served basis