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

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Due Date and Notes</th>
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<tbody>
<tr>
<td>3/6</td>
<td><strong>Lecture 8: Learning Human Behavior from Data 1</strong> <em>(sociolinguistic behaviors)</em></td>
<td>Paper 4 responses due</td>
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<td></td>
<td><strong>Quiz 2</strong></td>
<td>TS</td>
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<td>3/8</td>
<td>Class discussion: Paper 4</td>
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<tr>
<td>3/13</td>
<td>spring break, no class</td>
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<tr>
<td>3/15</td>
<td>spring break, no class</td>
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<tr>
<td>3/20</td>
<td><strong>Lecture 9: Learning Human Behavior from data – Part 2</strong> <em>(Complex phenomena)</em></td>
<td>Paper 5 assigned</td>
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<td>TS</td>
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<td>3/22</td>
<td>Class discussion: HW3 proposals</td>
<td>HW3 final proposals due 3/24</td>
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<td>Students</td>
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<tr>
<td>3/27</td>
<td><strong>Lecture 10: Learning Human Behavior from Data, Part 3</strong> <em>(MMORGs)</em></td>
<td>Paper 6 assigned</td>
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<td></td>
<td><strong>Quiz 3</strong></td>
<td>Paper 5 responses due</td>
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<td>TS</td>
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<td>3/29</td>
<td>Class discussion: Paper 5</td>
<td>HW 2 due</td>
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<td>Student</td>
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## Schedule and Topics

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