Lecture 3: CS 5306 / INFO 5306: Crowdsourcing and Human Computation

Course Logistics

Instructor:

- Prof. Haym Hirsh, haym.hirsh at cornell dot edu
- Gates 352
- Office hours: Mondays 11:15am 12:15pm and by arrangement

• TAs:

- Ozan Irsoy, oi32 at cornell dot edu
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- Course Web Page: http://www.cs.cornell.edu/courses/cs5306/2016sp/
- Textbooks:
 - Human Computation, by Edith Law and Luis Von Ahn This book is available online from within Cornell at www.morganclaypool.com/doi/pdfplus/10.2200/S00371ED1V01Y201107AIM013
 - Infotopia: How Many Minds Produce Knowledge, by Cass Sunstein This book is available online from within Cornell at books24x7.com
 - Additional readings (technical papers)

Course Logistics: Coursework

10%: Participation

- Attendance is required
- You are expected to:
 - Have read all assigned material before each class
 - Participate in class discussions
 - Participate in discussions on Piazza and be prepared to discuss them further in class
 - Submit news stories

Course Logistics: Coursework

30%: Small Assignments

- Every week or two
- Intended to give you hands on experience with a topic
- May involve short writing assignments (1-2 pages)
- Submitted through CMS

Course Logistics: Coursework

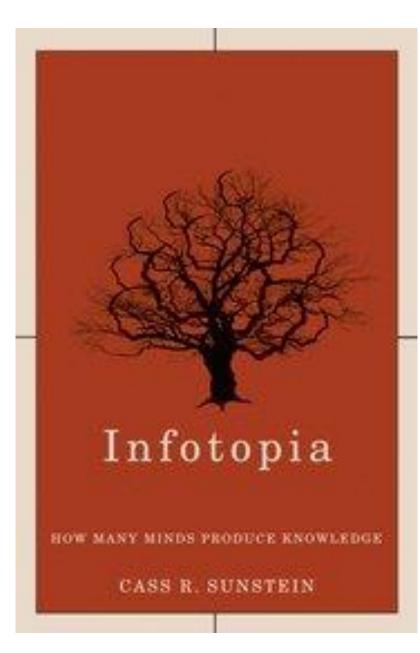
60%: Group Project

- Work in teams of size ?
- Intended to allow in-depth exploration of a topic
- Will follow intermediate milestones for vetting project ideas, putting together teams, etc.
- Documented in a ~10-page paper
- Submitted through CMS

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Infotopia, Introduction

"Information is widely distributed in society. Most human beings on the planet have bits of information from which others might benefit. But groups and institutions often fail to obtain the information that individuals have. As a result they end up making avoidable and sometimes disastrous mistakes."

Infotopia, Introduction

Groups

- do not correct but instead amplify individual errors
- emphasize information held by all or most at the expense of information held by a few or one
- fall victim to bandwagon or cascade effects
- end up in a more extreme position in line with the ... tendencies of their members

• What is a group?

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 - "Any collection of people"

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 - 2. Deliberation (including voting)

Deliberation

- Does deliberation actually lead to better decisions? Often it does not.
 - deliberating groups often do not obtain the knowledge that their members actually have
 - Informational influences: group members fail to disclose what they know out of respect for the information publicly announced by others
 - Social pressures: lead people to silence themselves to avoid the disapproval of peers and supervisors

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 - 3. Prediction markets

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- How are outcomes obtained from groups?
 - 1. Average
 - 2. Deliberation (including voting)
 - 3. Prediction markets
 - 4. Web 2.0

Condorcet Jury Theorem

- If:
 - Each person is more likely than not to be correct, and
 - Majority vote is taken
- Then:
 - The probability that the majority vote will be wrong is very low.
- Problem: Reverse is also true

Assignments

- Human Computation, Chapter 1
 - Due: Thursday, 4 February 2016