

Impact of AI DeCal Syllabus

CS 198-90 Fall 2018

Location: Dwinelle 105, Time: Wednesdays 6:30-8:00pm, 1 Unit

Instructors

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Format of Class

Small, discussion-based with readings and short writing assignments

Key Learning Outcomes

- Become conversant in the implications of AI on the world we live in
- Recognize the interconnectedness of the various economic, societal, and ethical challenges facing AI

Guiding Principles

- Emphasize that AI is fundamentally about building tools for people to use which leads to intersections with many other disciplines. This makes having cross-field conversations important.
- Focus class on discussions
 - Use lectures and readings to provide context to steer comments
 - Cover both sides of the coin to keep from sliding into shallowness
- Use essays to make sure students can, in their own words, respond intelligently to tough questions
- Use activities to give students time to engage with material. Have them use acquired knowledge in discussions to delve deeper.

Methods of Instruction

- Combination of lecture and discussion
- 15 min quiz at the beginning of class
- 30 min lecture to introduce the topic and familiarize students with relevant issues
- 35 min activity/game and follow-up discussion

Evaluation of Student Performance

- Quiz every week at the beginning of class, testing on both the previous week's lecture content and the current week's reading. The quizzes will be open note.

- Homework: Four writing assignments, students need only complete three writing assignments. Each writing assignment should be a short essay, two pages double-spaced. The writing assignments should be a reflection of the previous few weeks of content, relating two topics
- Attendance policy: One free absence, one additional absence can be made up by doing all four writing assignments
- Grading: 40% quizzes, 20% each writing assignment
- Students must have at least a 70% grade in the class and not miss any more than one (two if an additional writing assignment is completed) absence to pass the class

Lecture Topics/Schedule

- Week 1: A Brief History of AI
- Week 2: A Survey of Modern ML
- Week 3: The Data Revolution
- Week 4: A World of Pure Automation?
- Week 5: The Self-Driving Cars of Today
- Week 6: Optical Illusions for Neural Networks
- Week 7: Artificially Generated Data
- Week 8: Bias in AI
- Week 9: Artificial General Intelligence
- Week 10: Human-Compatible AI
- Week 11: Research Guest Lecture
- Week 12: Industry Guest Lecture