Course Title: Ethical Data and AI: Concepts and Tools for Responsible Decision-Making
Course Code: TECH 113
Instructor: Angel Evan

Class Sessions and Recording
Meeting days and times: Wednesdays at 5pm PDT
Meeting location: Zoom (details will be shared with registered students prior to first class meeting).
Classes meet online weekly for 60-90 minutes, with each class recorded and made available online. Weekly classes alternate between learning new concepts/tools and live cohort presentations. The class structure is highly participatory and interactive, and students should apply learnings from the lectures to the preceding case studies, which they will present live the following week.

Course Features
- Live session
  - Lecture with some Q&A
  - Group presentations and discussions
  - Requires interaction and active participation
  - Guest speakers
- Assignments & Coursework
  - Assignments and course materials are posted in Canvas
  - Students will work on four pre-defined group case studies of the Instructor’s choice
  - Students will submit a written one-page summary detailing their decisions regarding each case study.
  - Student will elect one member from their cohort to present their decisions on the case study (recorded)
  - Both the Instructor and student cohorts will provide feedback on each cohort’s decision
- Instructor will hold office hours
- Individual conferences available by request

Course Summary
TECH 113 is a course for those interested in understanding the ethical use of data and its impact in various situations. Students will learn to make decisions in ethically complex cases involving data, which they can apply to their organizations. This course goes beyond creating high-level awareness of data-related issues and focuses on...
making decisions in ethically ambiguous situations. It will provide current leaders and business professionals charged with making data decisions with tools and decision-making capabilities for dealing with data-related ethical problems in real-world scenarios.

*Please see course page for full description and additional details.

**Grade Options and Requirements**

Only ‘No Grade Required (NGR)’ and ‘Credit/No Credit’ options are available for the course. A letter grade is not an option. Students who have a conflict during the set day/time for the class can watch a video of the lecture online. However, participation with your assigned cohort cannot be made up, and students must participate in at least three of the four case studies to pass the course.

- No Grade Requested (NGR)
  - This is the default option. No work will be required; no credit shall be received; no proof of attendance can be provided.

- Credit/No Credit (CR/NC)
  - A passing grade (for "Credit") = at least 70% of expectations accomplished

*Please Note: If you require proof that you completed a Continuing Studies course for any reason (for example, employer reimbursement), you must choose either the Credit/No Credit option. Courses taken for NGR will not appear on official transcripts or grade reports.

**Textbooks/Required Materials**

No textbooks are required to complete the course. However, extended reading material is provided and strongly encouraged for students seeking a deeper understanding of the topics covered in the course.

**Pre-reading material**

Read the ‘cohort design and dynamics’ section on Canvas regarding cohort dynamics before starting the course. Members of each cohort are encouraged to connect on Canvas before the course to make basic introductions and discuss how the cohort would prefer to collaborate for each case study.

**Tentative Weekly Outline**

**Week 1:**
1. Overview of the class; its purpose and goals
2. Quick review of cohort design and dynamics:
3. Key Concepts:
   a. Main ethical challenges:
   b. Examples of ethics in action
   c. An introduction to logic (formal vs. informal) and how to apply it as a tool
   d. Critical thinking skills and examples

Please contact the Stanford Continuing Studies office with any questions
365 Lasuen St., Stanford, CA 94305
continuingstudies@stanford.edu
650-725-2650
4. Tools:
   a. Argument mapping
   b. Problem framing

Week 2:
1. Key concepts
   a. The difference between illegal and unethical
   b. Designing for transparency and explainability
   c. Overview of current data privacy laws (Potential guest speaker)
2. Tools:
   a. How to create a “Transparency Matrix”
   b. Ethic graphs
3. Introduce case study #1

Week 3:
Cohorts present case study #1

Week 4:
1. Observations on case study #1
2. Key concepts
   a. The difference between ethics and the perception of ethics
   b. Data are a proxy for people
   c. Overview of machine learning models and the data that power them
3. Tools
   a. Sorting ethics vs. optics
   b. Ethical liability calculators
   c. How to spot redundant encodings
4. Introduce Case Study #2

Week 5:
Cohorts present case study #2

Week 6:
1. Observations on case study #2
2. Key concepts
   a. How to reconcile the differences between business values, e.g., KPIs vs. ethical values
   b. Data Ethics vs. Data Privacy
   c. Data weighting—are all data weighted equally, or equally important?
   d. Correctly classifying ethical issues, legal issues, and governance issues
   e. Differentiating between compliance and ethics
   f. An introduction to data governance
3. Tools
   a. Creating a data governance framework for both large and small companies
4. Introduce Case Study #3
Week 7:
Cohorts present case study #3

Week 8:
1. Observations on case study #3
2. Key concepts
   a. Data ethics involving machines and robots
   b. Identifying and assessing ‘Ethical Significance’
   c. Establishing chains of ethical responsibility and accountability
3. Tools
   a. Benefit vs. Harm analysis
   b. Distinguishing and ranking competing stakeholder interests
4. Introduce Case Study #4

Week 9:
Cohorts present case study #4

Week 10:
1. Observations on case study #4
2. Closing thoughts on the course (participation from both students and instructor)
3. Course closure logistics, e.g., instructor evaluation, grading, Canvas, etc.