

Title: Big Data, Big Responsibilities: The Law and Ethics of Business Analytics

Instructor: [Mihir Kshirsagar](#)

Fall 2021

Office Hours (via Zoom): Mondays 1p - 2p or by appointment

Office Hours (in person): Thursdays 2:30p - 3:30p

Syllabus – Draft 5-20-2021

General Description

This course introduces students to the legal, policy, and ethical dimensions of algorithmic decision making. We are in the midst of a profound shift in society where critical decisions in commercial and social contexts are increasingly being run through automated decision-making systems. This increased reliance on data-driven decisions creates opportunities for both financial gain and social good. But it poses challenges to social norms and laws that requires carefully thinking about how to make sound, ethical decisions. In particular, because regulations are rapidly evolving in this space, there is an urgent need for forward-thinking businesses to anticipate these novel risks and build sustainable business models. The class will engage in discussions about cutting-edge research and novel challenges that are now frequently in the news.

Learning Objectives

My goal is to help you think about challenging analytical questions through an ethical framework. The course is designed to help you:

1. Understand the legal and ethical implications of business decisions;
2. Exercise thoughtful judgment and communicate your values;
3. Evaluate the risks and opportunities of relying on algorithmic decision making.

Course Structure

We will cover a lot of ground in just 6 weeks. I have attempted to keep the readings manageable, with the goal that everyone comes to the seminar fully prepared to participate actively. Each session will be divided into two parts. First, is a mini-lecture, followed by a discussion of the readings. Second, is a close analysis of a particular case study. I will share a short pre-read memo to prepare you for the case study discussion. In class, I will ask students to adopt the perspectives of different stakeholders and engage in a structured debate of the issue. I will also create a Slack workspace for asynchronous discussions and collaborations.

Course Requirements and Grading

Strategic Memo [50%]

The final project is a strategic memo directed to a specific company or organization that recommends whether to adopt an algorithmic decision making tool to make business decisions. The memo should be 2000 -3000 words and should describe the context for the decision, identify the relevant legal and ethical challenges, and make concrete recommendations for what action the business should take. The memos will be graded based on the quality of the analysis, engagement with the ethical considerations, persuasiveness, and organization. I will ask for a draft introductory paragraph for the memo two weeks before the deadline. (I understand that it is only a draft; sharing it on time is worth 10%.)

Case Study Preparation [20%]

By 10a on the day of our seminar (Thursday) please submit three or four bullet points sharing your initial reactions and questions about the case study topic.

Participation [30%]

Participation credit will be assessed holistically: quality matters, not just quantity. The seminar structure is particularly dependent on active participation, respectful listening, and open dialogue.

Deadlines

Deadlines are an inevitable part of life. Please respect them out of regard for yourself and your peers. If you encounter difficulties, I am open to finding accommodations, but I need sufficient notice before the deadline or there will be a grade penalty.

Tentative Agenda

Week 1: Overview & Ethics

<https://hbr.org/2020/10/when-does-predictive-technology-become-unethical>
<https://www.scu.edu/ethics-in-technology-practice/ethical-lenses/>

Case study: Risk models in the Financial Crisis

Week 2: Technical Background

<https://fairmlbook.org/introduction.html>
[How big data is unfair. Understanding sources of unfairness in... | by Moritz Hardt](#)

Case Study: Content Moderation

Week 3: Fairness & Discrimination

[Big Risks, Big Opportunities: the Intersection of Big Data and Civil Rights](#) _____, White House (2016)

Ruha Benjamin, [Assessing risk, automating racism](#) _____, Science (Oct. 25, 2019)

<https://www.brookings.edu/research/credit-denial-in-the-age-of-ai/>

[Apple Card investigation](#) _____

Case Study: Algorithmic Hiring

Week 4: Privacy

[Big Data: A Tool for Inclusion or Exclusion? Understanding the Issues \(FTC Report\)](#) _____

[What makes a dark pattern, dark?](#) _____

[Automated decision -making and profiling](#) _____, ICO UK

Case study: online advertising

Week 5: Accountability & Transparency

EU AI Regulations

[\[2101.05853\] Algorithmic Monoculture and Social Welfare](#) _____

Case Study: Credit Lending

Week 6: Justice & Data Governance

<http://proceedings.mlr.press/v81/barabas18a/barabas18a.pdf>

Accountable Algorithms 165 U. Pa. L. Rev. 633 (2016 -2017)

Case Study: closing reflections.

Optional background material:

<https://why.org/programs/ai-nation/>

Black Mirror on Netflix