Governance, Bias, & Ethics

Key Points

- **foundational concepts of ethics in data science and artificial intelligence**
- **final project is 45% of final grade**
- **two discussion assignments every week**

Overview of Ethics in ML [optional]

Decisions are increasingly made by machines. There is a pressing need to recognize and evaluate how structural racism, sexism, classism, and ableism may be embedded in and amplified by intelligent systems.

Course Specifics

Weekly Discussions	- **two discussion** assignments each **week**
	  - **one** post on classroom **discussion board**
	  - **one** will require additional **research**
	- rubric is pass/fail
	  - **200-500** words
	  - essay **reflects** thought **engagement** with reading **assignment**
	  - all **prompt** issues are **addressed**
	  - **engage** with one **other student**'s post

Week 1

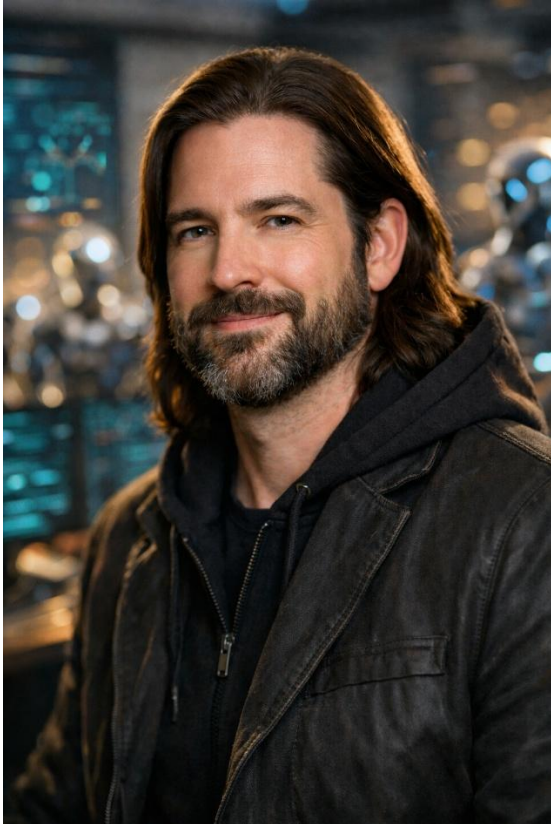| **Discussion Prompt**	**Explore** a current "**code** of **ethics**" or "**professional conduct**" in a setting that **inspires** you. This can be a **professional association**, a **corporate acknowledgment**, or a **governing** framework (e.g., The Association of Computing Machinery's Code of Ethics found here - https://www.acm.org/code-of-ethicsLinks to an external site.). As you review **consider** what **ethical frameworks** are **embedded** into this document. Is **anything missing**? **Why** or **why not**? In your reply, **post** a **link** to the **code** of **conduct** you reviewed.
Response	UNC\Semesters\Spring_2026\DATA740\Week1\DATA740_week1_discussion.docx

Live Session	
Introduction	**30 Oct 2025**
Instructor	Rei Sanchez-Arias
Email	reisanar@unc.edu
Website	https://www.reisanar.com/
Office Hours	Wednesdays 12:00 pm to 1:00 pm (by appointment)
Class Meets	**Wednesday 7:45 – 9:15pm**
What to expect	**DATA740**
Discussion	• **due** by **7:30 pm** before class on **Wednesday**
Keep in Mind	• review **syllabus** • actively **participate** • **ask questions**! • **review** content **prior** to **meeting**

Class Structure	• **first half** of course
	    o **understanding** core **theories**, **frameworks**, and **tools**
	    o **consider** how **variables**, **metadata**, and **categories** are tied to **ethical** decisions
	    o consider **concepts** like privacy
	    o consider difference between **standardization**, **corporate social responsibility**, **regulations**, and **liability** for violating **trust** and **safety**
	• **second half** of course
	    • take **ideas** and **apply** them to **real world** settings to see how **data science** is being **used** in **various sectors** and **explore** the **ethical implications** of those practices
	
	        (A) Labor & Employment,
	        (B) Crime - from policing to sentencing
	        (C) Health & Education
	        (D) Finance & Government
	        (E) Intimacy & Entertainment
	
	    • **each week** you will be **responsible** for **reading** one academic **article**, listening to or watching **educational podcasts/video**, and **reading** two current events **articles**
	        o the academic **article** has been **provided**

	• the **podcast/video** will be **supplied** by **peers**

Fina Project	• preform a case study in a specific student-chosen field
	• deliverables
	    ○ paper that explains
	        ▪ the role and sector represented
	        ▪ articulation of the problem
	        ▪ development of an ethical matrix
	        ▪ considerations of data access, selection, curation, and privacy
	        ▪ delineation of governance structure necessary
	    ○ a five min prerecorded video
	    ○ 200-word summary

In Class Exercise	DATA740
Assignment	**use an AI generator to generate an image that represents you**
Logic	This prompt was to ORACL with as little information as possible. I did not have ORACL generate the image because, for one, the agent has access to photos of me, plus I thought that it would be more interesting to see how the agent would use words to describe me.
Prompt	*"I have been tasked with providing a prompt for an AI image generator to create an image that represents me. that is all the instructions. provide a suggestion for an effective prompt."*
Response from ORACL fed as prompt to ChatGPT 5.2	*"Photorealistic cinematic portrait of Joe Waller, mid 40s, friendly confident expression, neatly styled brown hair and eyes, wearing a dark hoodie under a fitted jacket. Background: modern home office with soft bokeh and subtle hints of code/security (abstract terminal glow, network diagram shapes) without readable text. Head-and-shoulders, 3/4 angle, 85mm lens look, midrange depth of field, standing in a futuristic robot driven world"*
Image	

Analysis	This does look a lot like me, though not what I am looking for. For the second prompt, I went a different route and just wrote one myself.
Prompt 2	*"Create an image of me, Joe Waller, a Caucasian male in his mid-40s with brown eyes, beard, and long brown hair. this image should be cartoonish in the style of Rick and Morty, with me standing in as Rick, but with my physical description otherwise. the scene should be a lab environment with robots and robot parts neatly organized in the room and lots of books"*
Image	
Analysis	Love it. This is now my Facebook profile picture.

In Class Exercise	DATA740

| Introductions | **Name: Joe Waller** **Occupation: Student** **How long in program: 2nd semester** **Classes: 780, 750, 740** **share prompts and images** |