

**Course Code:** HUMA1930  
**Course Title:** Introduction to the Ethics of Artificial Intelligence and Data Science  
**Course Offered in:** Spring 2025  
**Course Instructor:** Linus Huang

**Course Description:** This course introduces the ethical considerations surrounding the development and application of artificial intelligence (AI) and data science. Topics include AI's impact on privacy, bias, transparency, and accountability. Students will learn the ethical principles and frameworks used to guide decision-making in the field and apply them to real-world scenarios. The course will also take a comparative perspective, examining how different cultures and societies approach the ethical issues. Finally, the course explores the societal implications of AI and data science, including issues related to power, inequality, the global governance of AI and its role in shaping social policy. This course is suitable for students with and without technical and philosophical backgrounds.

**Course Intended Learning Outcomes (ILOs):**

	<b>Course ILOs</b>
1	Recall and summarize various ethical theories and their relative merits in helping to resolve ethical issues related to AI and data science.
2	Develop the ability to understand, evaluate, and discuss ideas and arguments related to the ethical considerations and social implications of AI and data science.
3	Understand the global governance of AI and its role in shaping social policy and be able to act in society with cultural sensitivity
4	Be able to apply knowledge of the ethical issues surrounding AI and data science in sectors to create appropriate solutions
5	Improve written and oral communication skills
6	Develop independent work and teamwork skills, especially the ability to carry out research, individually and as part of a team, and to coordinate team member activities

**Course Outline:**

<b>Week</b>	
1	Introduction to the course Introduction to AI and data science

2	Introduction to value-sensitive design
3	Introduction to ethical theories: east and west
4	Introduction to philosophy of technology
5	Topic 1: the ethics of self-driving car
6	Topic 2: value alignment and control problem
7	Topic 3: ethics of data I – surveillance capitalism
8	Topic 4: ethics of data II – privacy, ownership, and consent
9	Topic 5: algorithmic bias I – statistically problematic bias
10	Topic 6: algorithmic bias II – morally and socially problematic bias
11	Topic 7: online manipulation
12	Topic 8: misinformation
13	Conclusion

**Planned Assessment Tasks:**

Weekly quizzes: 50 %

Weekly group assignments 20 %

Final paper:	20	%
Small individual assignment:	5	%
Participation:	5	%

### **Readings:**

Selected chapters from the following:

1. Crawford, K. (2021). *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press.
2. Coeckelbergh, M. (2020). *AI ethics*. The MIT Press.
3. Coeckelbergh, M. (2022). *Robot Ethics*. The MIT Press.
4. Nyholm, S. (2023). *This is Technology Ethics: An Introduction* (1st edition). Wiley-Blackwell.