Course Description

Unit 1. What technology wants?

An introductory unit to establish the foundation for the ethical discussions which will follow. We will discuss the foundation of the thought in regards to technology, its social, cultural and political position. Next we will learn how to ethically evaluate a technology phenomena or a specific use of the technology. We will define the problem with emerging technologies and cover a few ethical perspectives for analysing the morality of emerging technologies.

Class 1. Technology Today: Utopia or Dystopia? - 2/3/2022

Is technology good or bad for us? Was the Unabomber right?
Deterministic approach towards technologies

The tension of progress and the innovation presumption, The Collingridge dilemma

Class Readings (before 1st class):


Suggested Watch/Read/Listen


2. Kevin Kelly podcast “The Unabomber was Right; the Amish, too: https://radioopensource.org/kevin-kelly-on-tech-the-unabomber-was-right-the-amish-too/

3. The Big Bang Theory - The Emotion Detection Automation: https://www.youtube.com/watch?v=TfNnpsYATbQ


Class 2. The Culture of Technology - 9/3/2022

Change of perspectives: from neutrality to critical, from restrict to wide

Definitions: Co-production, Situated technology, Pacey triangle

Class Readings:


Suggested Watch/Read/Listen


2. The followup, so who won the bet? https://www.wired.com/story/a-25-year-old-bet-comes-due-has-tech-destroyed-society/

Class 3. Tension of Values, (and some about Morality and Norms)- 16/3/2022

Values, Morality and Norms

Simulation in class: "the moral machine"

The neutrality thesis VS the embedded values thesis

Class Reading:


Class 4. Three Ethical frameworks -23/3/2022

Ethical Frameworks: Consequentialism, Deontological and Ecological

Discussion on the moral obligation to whom? to what?

Class Mandatory watching:

1. Watch Black Mirror: "Fifteen Million Merits", Season 1, Ep.2. For class, write down a few points for our ethical discussion.

Suggested Watch/Read/Listen

1. Read this example in which they analyze micro-targeting from different ethics perspectives: The Ethics of Political Micro-targeting, Gizzi, 2018. Link

Class 5. Does technology have race? 30/3/2022

Prominent ethical concerns of AI
From information ethics to data ethics

What can data feminism contribute?

Key principles for good AI


Class Reading for class:


Suggested Watch/Read/Listen


Unit 2: Technological Use cases

In this unit we will apply the ethical framework on different technological domains. Students (in groups of 2-3) will prepare an introductory presentation to the class. Further instructions for the presentation will be given in class. Other students, who are not presenting, read and reflect as usual on the google doc. We will end this unit with a hands-on workshop in class based on the "Value Sensitive Design" Methodology.


Group1: Crispr technology (15 minutes)

Group2: Bionic Engineering (15 minutes)

The question of Nature VS Technology

Definition of Extrinsic/Intrinsic ethical concerns

The cyborg manifesto (Donna Haraway)


**Class Reading:**


**Suggested Watch/Read/Listen**

1. 25 years of wired predictions – why the future never arrives

2. What will humans look like in 100 years?, Futuristic Juan Enriquez on TED Summit:
   https://www.ted.com/talks/juan_enriquez_what_will_humans_look_like_in_100_years

**Passover break**

**Class 7. Social Robots - 27/4/2022**

Group3: Social Caring Robots (15 minutes)

Group4: Sex Robots (15 minutes)

. Affecting Computing

. The question of trust, rights and human behaviour & relationships

**Class Reading:**


Suggested Watch/Read/Listen

1. NYtime article: Would you let a robot take care of your mother? Link
2. Ted talk by Kate Darling* Why we have an emotional connection to robots?*. https://youtu.be/Uq6XgrYBugo

*Memorial and Independence day break*

Class 8. Autonomous Robots - 18/5/2022

Group5: Combat Robots (15 minutes)

Group6: Autonomous Cars (15 minutes)

. the morality of material agents

Class Reading:


Class 9. Digital/Online Experiences- 11/5/2022

Group7: Artificial Humans Avatars (15 minutes)

Group8: Virtual and Augmented Reality (15 minutes)
.Persuasion technologies, from manipulation to Dark Patterns

Class Reading:


Suggested Watch/Read/Listen


Class 10. Climate/Food Engineering 25/5/2022

Group9: Geo-engineering technology (15 minutes)
Group10: FoodTech (15 minutes)

. The idea of “techno-solutionism”
. How far can the technological plateau reach?

Class Reading:


Suggested Watch/Read/Listen

2. Kurzgesagt – In a Nutshell, Geoengineering: A Horrible Idea We Might Have to Do: https://youtu.be/dSu5sXmsur4

Class 11. Value Sensitive design (VSD) - 1/6/2022,

*Value Sensitive Design* methodology and in-class workshop

Class Reading:


Class 12. Inclusive Design in the Industry - 8/6/2022

*VSD workshop wrap-up

*Guest Talk: Open Style Lab, Yasmin Keats

*Final submission explanation

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Course Goals

The goal of this course is to allow prospective designers of the technology (that means you!) to be able to:

- Become familiar with a range of ethical issues raised by modern technology
- Understand the importance of questioning and debating over the social and cultural implications of technology
- Use ethical reasoning to make informed and principled choices
- Recognize and be familiar with the language and content of ethical discourse
- Understand modern debates surrounding ethics and technology
Grading

All members of the class share responsibility for being active participants. As part of this class, every student is required to fulfill the following assignments:

1. Class materials are divided into Mandatory and Optional (Suggested).

2. Class mandatory readings: For each class, choose 1 item from the “Class reading” list and submit a short reflection before class on a class google doc: https://docs.google.com/spreadsheets/d/1oYbpvfaM6psVWO4IlfطرOr9GBZyn0u4ZL45UDW-34rI/edit?usp=sharing

3. In class presentations of use cases: Choose a topic to present in class. 3 students per group. List yourself in the google doc in advance under the tab “TECH use cases”. Submit the presentation in google slides or PDF after completion.

4. Submit a final assignment

Grades:

40% – Semester assignments (30% weekly readings/assignments, 10% class presentation). We will discuss weekly readings in class

60% – Final assignment

Learning Outcomes

Reading List

Reading (in order of appearance. Note, not all mandatory):


Springer, Berlin, Heidelberg.


