Technology and Ethics

Richard Lawrence

Winter 2020–21

1 Course Description

How does technology affect our personal lives, relationships, and political institutions? How should it? In each of these spheres, technology can both augment and subvert our existing capacities. This course will examine the ethical dimensions of these effects of technology. Should you exchange your personal information for free access to a convenient service? How should we respond to the threat to traditional institutions posed by cryptocurrencies, deep fakes, or self-driving cars? Are we permitted to enhance our bodies beyond our human capacities? Are we obligated to develop technologies to solve problems like global warming? By focusing on practical questions that we face as persons and citizens, we will examine what it means to live in the modern world.

1.1 Contact information

	Instructor
	Richard Lawrence (rwl)
	richard.lawrence@uni-tuebingen.de
Office hours:	Online, by appointment

1.2 Course Server

To participate in the course, you will need access to the course Unix server. The server will be our "home", and will play the role that courseware like Moodle or Ilias plays in other courses, except that it will allow for more flexible and interesting interactions. All course communication will take place via the server.

To get access to the server, sign up for the course via ALMA and send an email to with the username you want to use to: richard.lawrence@uni-tuebingen.de.

1.3 Course Meetings

We will meet once a week, Monday 6:30PM-7:30PM, for a synchronous group discussion via SenfCall. Other communications (informal chat, group emails, etc.) will take place on the server. Small group discussions about topics of common interest can be organized on the server and take place on services like Jitsi or SenfCall.

2 Course Requirements

> Why not permit the student to control the system, show him how to do so intelligently, and make it easy for him to find his own way? Discard the sequences, items, and conversation, and allow the student to move freely through materials which he may control. Never mind optimizing reinforcement or validating teaching sequences. Motivate the user and let him loose in a wonderful place. (Ted Nelson, *Computer Lib/Dream Machines*, p. DM18)

Due to the pandemic, this course will take place online, and much of your learning will be asynchronous. This is an opportunity for us to experiment with a non-traditional structure. I want our learning in this course to be *participatory* and *creative* and to *branch off in many directions*, much like the learning systems Nelson imagines.

Accordingly, both the content and the structure of the course are going to evolve. We, the participants, are going to decide how to proceed as we go along.

2.1 Participation in the course community

In this course, it is important that we become a genuine community, self-organizing around our common interests. Besides making the course more fun, becoming a community will allow us to learn about and confront ethical issues in a way that's not merely abstract and theoretical.

Thus, active participation in the course community is required for credit. That means you should at least:

- explore the readings that look interesting to you
- update your .plan file at least once a week with topics you are interested in and what you are reading
- invite other course members to discuss readings and topics you are interested in
- participate in discussions organized by others
- read the texts we have agreed to discuss as a group, and attend the weekly synchronous discussion online

2.2 Final project

In addition to participation, you will a complete a final project in this course. The goal of the final project is for you to engage with an ethical issue in your own life related to technology. You will reflect on some of the ideas you encounter in the course and put them into practice.

Your project might take various forms. You could contribute to a Free Software project by writing code or documentation. You could investigate the privacy practices of a social media site that you use, writing and sharing a blog post about your findings. You could help a local business make transactions via cryptocurrencies. You could produce a podcast of an interview with someone who has lost their job due to automation. There are many other possibilities; be creative!

The nature of your project, and the number of credits you get for it, depends on your *Studienordnung*. You will write a proposal, and develop it in consultation with me, before completing the project you propose. If the project itself will not involve producing a piece of writing or other media, you should plan to write a short summary describing your project and what you learned by completing it.

3 Readings

This is a sampling of possible readings for the course, organized into a few topics. A more detailed list is available on the course server. Everyone is welcome to add to this list as the course goes along.

3.1 Freedom and the hacker ethos

The hacker culture and the culture of the early internet provide many important examples of ethical reflection and activism about technology. The texts of this culture explore philosophical questions like: what role does technology play in securing individual freedoms and well-being? Should technology be considered property, and should we have the right to use it as we see fit? What obligations do we incur by using technology? by creating it?

Readings:

- Steven Levy, *Hackers: Heroes of the Computer Revolution*
- Ted Nelson, *Computer Lib/Dream Machines*
- Thomas Streeter, "That Deep Romantic Chasm"
- Gary Wolf, "The Curse of Xanadu"
- Richard Stallman, "The GNU Manifesto"
- Richard Stallman, "Why Software Should Not Have Owners"
- Sam Williams, *Free as in Freedom*
- Eric Raymond, *The Cathedral and the Bazaar*
- Eric Raymond, "How to Become a Hacker"
- Michael Huemer, *The Problem of Political Authority*
- The Mentor, "The Hacker's Manifesto"
- Lawrence Lessig, "Code is Law"
- Aaron Swartz, "Code, and other laws of Wikipedia"
- John Stuart Mill, *On Liberty*

3.2 Personhood and privacy

These readings examine some issues related to the concept of personhood and the personal sphere. What does it mean to be a "person"? How is technology shifting the boundaries of personhood, both in our cognition and in our bodies? Do we have rights over information about us? What sort of data is collected about you as as you move through cyberspace—or physical space? Who has the right to collect such data, and should there be limits to how it is used or retained? Should states have the right to undertake mass surveillance of communication?

Readings:

- Linda Hogle, "Enhancement Technologies and the Body"
- John Hockenberry, "The next brainiacs"
- Vannevar Bush, "As we may think"
- Howard Rheingold, *Tools for Thought*
- Douglas Engelbart, The mother of all demos (video)
- Cliff Ski, "Hi, I'm from the Games Industry. Governments, Please Stop Us."
- Thomas Nagel, "Concealment and Exposure"
- Eric Hughes, "A Cypherpunk's Manifesto"
- Glen Greenwald, "Why Privacy Matters" (video)
- Glen Greenwald, *No Place to Hide*
- Jeremy Bentham, correspondence on the design of a panopticon prison (from *The Works of Jeremy Bentham, vol. 4*)
- Judith Jarvis Thomson, "The Right to Privacy"
- Andrei Marmor, "What is the Right to Privacy?"
- Esther Kaplan, "The Spy Who Fired Me"

3.3 Artificial intelligence and automated decision-making

These readings consider some questions about artificial intelligence and its increasingly significant role in our lives and society. What are the consequences of using technology to augment our capacities for making decisions and acting? What ethical considerations should enter the design of AI technologies? Who is responsible for decisions made by AI? Can machines or software be agents, and have moral status, rights, and obligations as persons?

Readings:

- Nick Bostrom, "Ethical Issues in Advanced Artificial Intelligence"
- Nick Bostrom, *Superintelligence*
- Philippa Foot, "The problem of abortion and the doctrine of double effect"
- Judith Jarvis Thomson, "The Trolley Problem"
- Tim O'Reilly, *WTF: What's the Future and Why It's Up to Us*
- David Gunkel, "A vindication of the rights of machines"
- Stanislaw Lem, "The seventh sally, or how Trurl's perfection led to no good"
- Solon Barocas, Moritz Hardt, Arvind Narayanan, *Fairness in Machine Learning*
- Susan Schneider, *Artificial You*

3.4 Technology and institutions

A final set of readings examines the relationship between some recent technological developments and traditional democratic institutions. Who has the right to control the flow of information in society, whether in the form of ideas, money, laws, or state secrets? How is censorship impacting communities, both online and offline? Should technology be used to improve traditional institutions, or replace them? What protections are needed when new technology replaces human labor? Can we use technology to create a more democratic society?

Readings:

- Hannah Arendt, *The Human Condition*
- John Perry Barlow, "Declaration of the Independence of Cyberspace" and "The Economy of Ideas"
- David Chaum, "Blind Signatures for Untraceable Payments"
- "The Bitcoin Foundation Manifesto"
- Robert Nozick, *Anarchy, State and Utopia*
- Henry Farrell, "Dark Leviathan"
- Bruce Schneier, "The Battle for Power on the Internet"
- Julian Assange, "How Cryptography is a Key Weapon in the Fight Against Empire States"
- Karl Marx, "Machinery and modern industry" (from *Capital* Vol. I)
- Bertrand Russell, "In Praise of Idleness"
- Jacques Ellul, *The Technological Society*
- Catherine Buni and Soraya Chemaly, "The Secret Rules of the Internet"
- Peter Levine, "Can the Internet Rescue Democracy? Toward an On-line Commons"
- Renee DiResta, "The Digital Maginot Line"