Science Fiction has explored many possibilities within Technology. This abstract explores the work of Stanislaw Lem, a Polish science fiction writer and researcher and its relation to ethics. A few chapters are explored in this abstract.
Introduction

Technology is changing lives!

Ordinary people are at risk due to misuse of technology.
What is the right thing?

- Future students are at a less advantage for guidance.
- Ethical decision-making are glossed over by many technology courses, with focus on business needs and achievements.
- Impacts on our environment, on society and the future?
- Science fiction often explores the effects of new technology. See example:
A Lemian approach?

- Fables with interesting ideas about ethics, philosophy and technology
- This presentation explores ethical lessons today’s Computer Scientists may draw from Stanislaw Lem
- Examples from his fiction will be used to explain best use of technology by identifying some key principles

But just before we start... let's learn about the author...
Lem Stanislaw

- Born in September 1921 in Poland
- Studied Physics and Mathematics
- Science fiction writer on subjects such as Philosophy and Technology
- Writing under a repressive regime: his work had to be approved by the communist state during Stalinism
Recognising Lem’s work...

Google created an interactive logo with games taken from the Cyberiad...

https://www.google.com/logos/lem/

https://fanart.tv/movie/2103/solaris/
The two (competitive yet omnipotent Engineers) Constructors use their technological skills to help others… but with consequences

Characters include typical fairy-tales between corrupt kings, dragons and disobedient robots
Chapter 1:

How the World Was Saved
Trurl creates a machine that can create anything beginning with the letter N
Trurl invites his friend Klapaucius to test the machine
Klapaucius tests out the machine using abstract concept such as ‘Nature’
Klaupaucius suggests ‘do Nothing’
Trurl is offended that his machine is being unfairly tested
The machine starts to remove various things and concepts from the universe from the alphabet (much to the dismay of the two characters)
Do Nothing...

- Today’s Technologist must be aware of all potential consequences during testing
- A machine is designed to carry out a perceived basic task, but there are hidden implications (e.g. think coding bugs)
- The Machine is capable of working well, but the correct instruction is also required
- Doing Nothing is worse than doing something

What were the unintended consequences?
Controversial AI 'Gaydar' Study Spawns Backlash, Ethical Debate

Research suggesting that artificial intelligence tools could accurately predict a person's sexuality by assessing a photo is now under ethical review.

- AI tools that apparently predict a person's sexuality using photos
- Backlash from academics, technology experts and LGBTQ advocates now facing scrutiny
- Weaponised for those considered in minority groups where outcome is dangerous
- What if it doesn't work?

What if this tool was used in a country where being considered homosexual was illegal?
Chapter 2:

Trurl’s Machine

2 + 2 = 7
Trurl creates a powerful eight-storey thinking machine.

He asks the ‘ritual’ question: “What’s two and two?” in which the great thinking machine barks ‘SEVEN!’.

After many amendments and debugging, the machine does not change its answer.

This leads to a frustrated Trurl kicking his machine and considering the uselessness of it which ‘hurts the machine’s feelings’.

The machine chases the two Constructors to crush Trurl and consequently destroys the town.

The machine self-destructs (eventually)
Poor implementation of A.I.

✧ All that hard work but implementation was poor
✧ Consider, will Artificial Intelligence feel emotions? (positive and negative)?
✧ Who controls who?

Why, this is mutiny! What do we do now?
Examples

Coronavirus: What went wrong with the UK's contact tracing app?

By Rory Cellan-Jones
Technology correspondent

Coronavirus pandemic

Covid-19 'tracking app' software automatically installed on phones may not be what you think

After months of work, the UK has ditched the way its coronavirus-tracing app...
Chapter 3:

I Spy A Good Shellacking
Klapaucius is gifted a robot from his frenemy Trurl.
The robot is able to grant any wish that Klapaucius desires.
Klapaucius asks for tools for a machine he is working on.
He then asks for a ‘copy’ of his friend Trurl which the machine obliges.
Klapaucius takes Trurl to the basement and gives him ‘a good shellacking’.
Trurl is able to escape back to his home.
Klapaucius visits him and tells him of the experience to a very gloomy Trurl.
The ethics of surveillance and artificial life

- Respect the rights of others just as we would expect others to respect our own privacy
- Another aspect of competitiveness is between I.T companies
- There are other aspects which can be explored such as cloning, transparency and so on.
Example

- Targeted ‘anger prone’ users on Facebook with political advertising
- Paid $5 million
- Harvested data without consent
- Created fake pages to provoke users, ads, posts and sharing of articles
Conclusion & Final Note
In this presentation, three chapters from the book Cyberiad was explored. Lem’s work highlights awareness and responsibility as a starting point of ethical creations. These stories are rich in philosophy, technology, ethics and politics. Yet, these fables can be presented to children to educate them.

More chapters are briefly explored in the paper. Please read the book and join me to discuss more…
Do not trust people. They are capable of greatness.

(Stanisław Lem)