1st ATHENA TECHNOLOGY FORUM

The Dilemma of AI education: Technology meets Educations meets Ethics

//Dr. Nava Shaked

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Dr. Shaked - Bio

- ✓ Ph.D. in Computational Linguistics in NLP from CUNY New York
- ✓ Head of MDS -Multidisciplinary Studies & CS Faculty member
- ✓ R&D in speech processing in Bell Labs, IBM & more
- ✓ Vast Industry experience: Speech platforms, VUI Dialog design, Call Center technologies and Multimodality
- ✓ Consulting for startups and enterprises
- ✓ My favorite: Avatars & Bots

AI

Multimodality

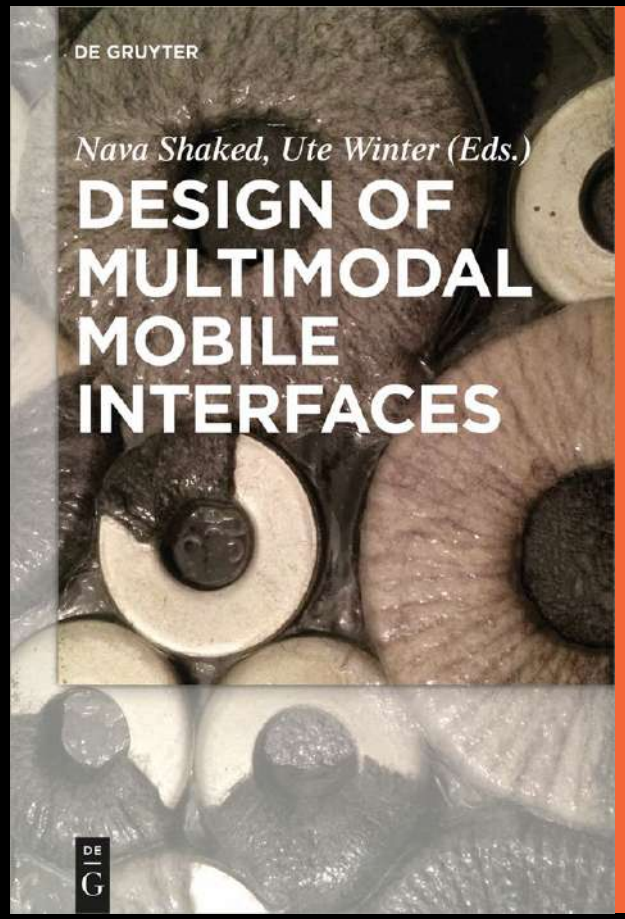
NLP

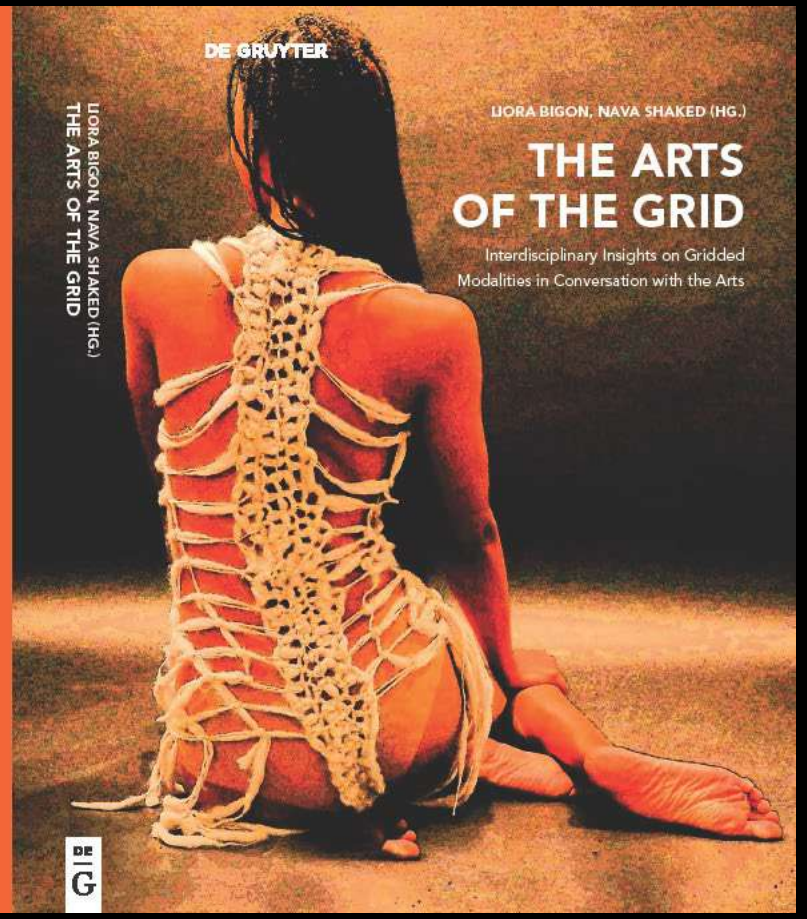
Ethics & AI

Conversational Interaction

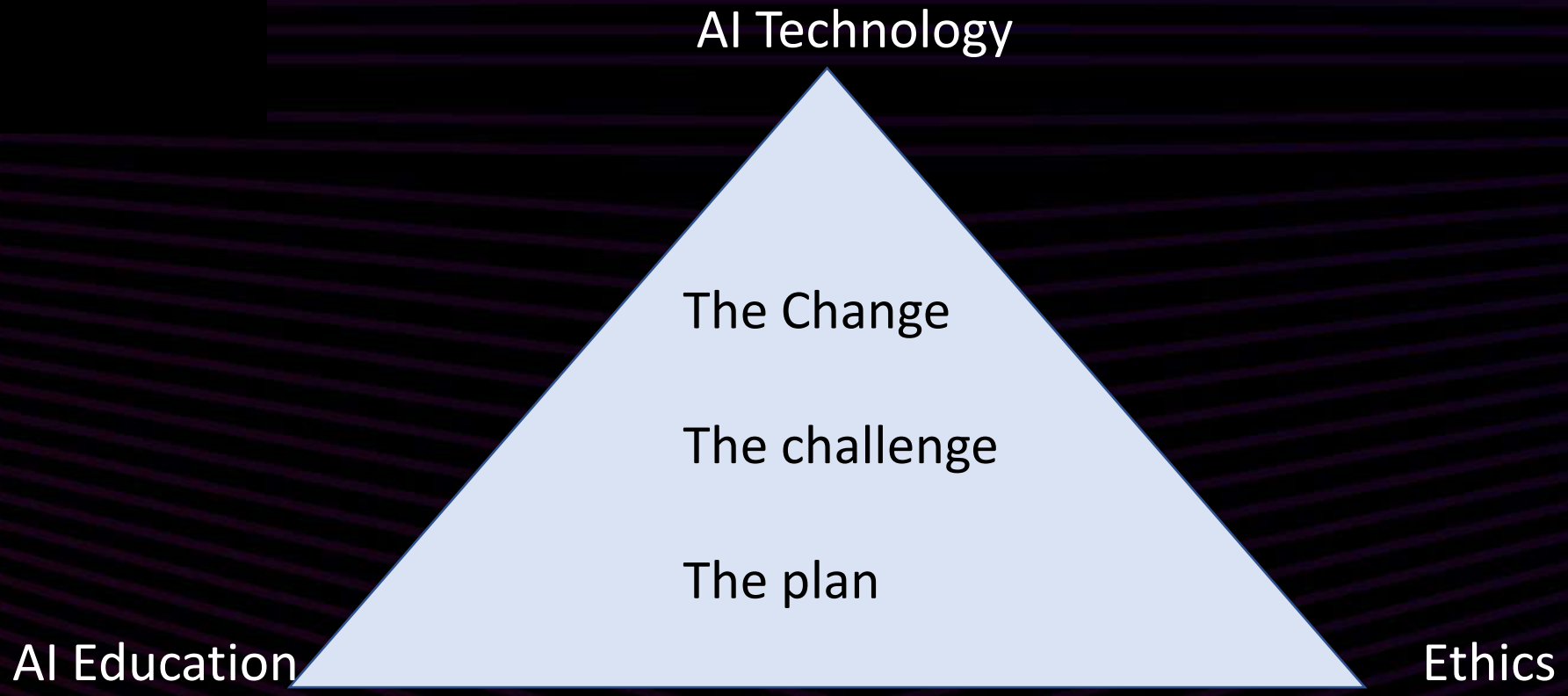
BOTS & AVATARS

Speech processing


DE GRUYTER
Nava Shaked, Ute Winter (Eds.)
DESIGN OF MULTIMODAL MOBILE INTERFACES


DE GRUYTER
LIORA BIGON, NAVA SHAKED (HG.)
THE ARTS OF THE GRID
Interdisciplinary Insights on Gridded Modalities in Conversation with the Arts
LIORA BIGON, NAVA SHAKED (HG.)
THE ARTS OF THE GRID

What’s on the agenda?



AI Technologies

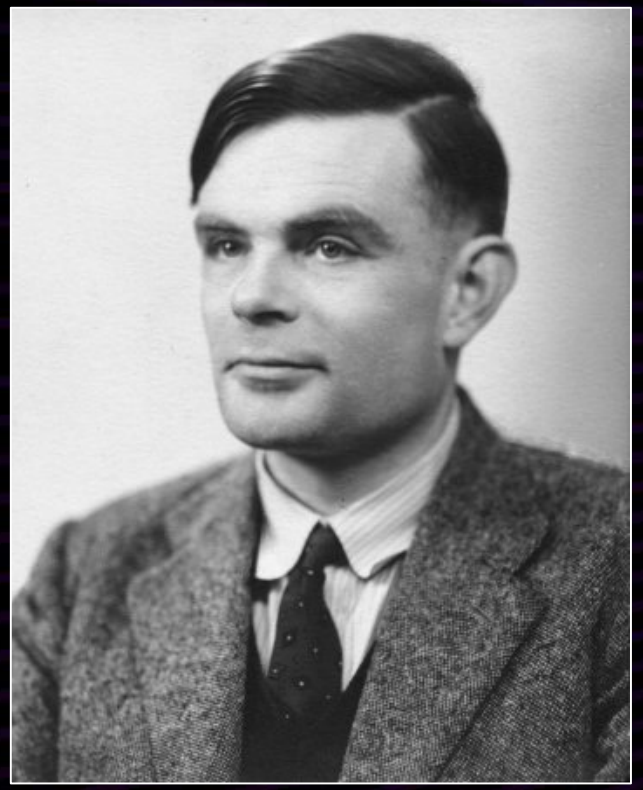
AI

Ignore and it shall pass..

Forbid (not realistic)

Embrace
Prepare
Adapt

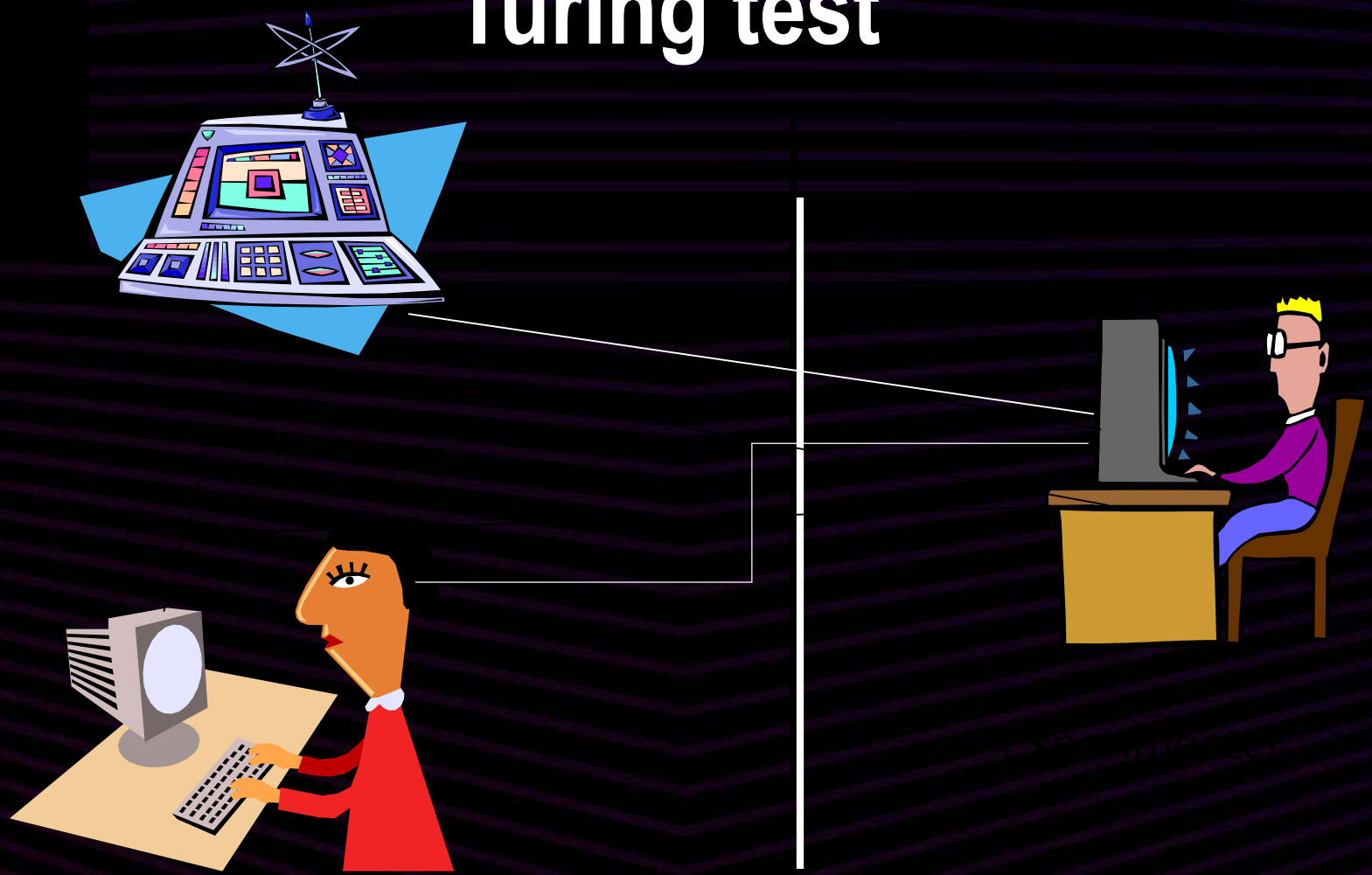
In the 1950’s Turing predicted that computers will be smarter then humans by 2000



Turing – the father of Computing and AI

2005- Ray Kurzweil in his book "The Singularity is near”
Predicted overloads by 2045

Turing test



AI technologies and implementations are here!

We are still looking for the right format ..

Why?

TMI

Diff Approaches

Many Disciplines

Industry vs. academy

Agenda

Change rate

Areas of AI

- Prediction & Risk Mang
- Robotics & Autonomous vehicles
- Image Processing
- Decision Support
- Process Automation
- NLP & Voice
- Generative design

AI Spectrum

Narrow AI

Google Duplex, Bots

Generative AI

DALL·E 2
Chef Watson, ChatGPT, BART

Edge AI

smart utility grid streaming video optimization, and drone management.

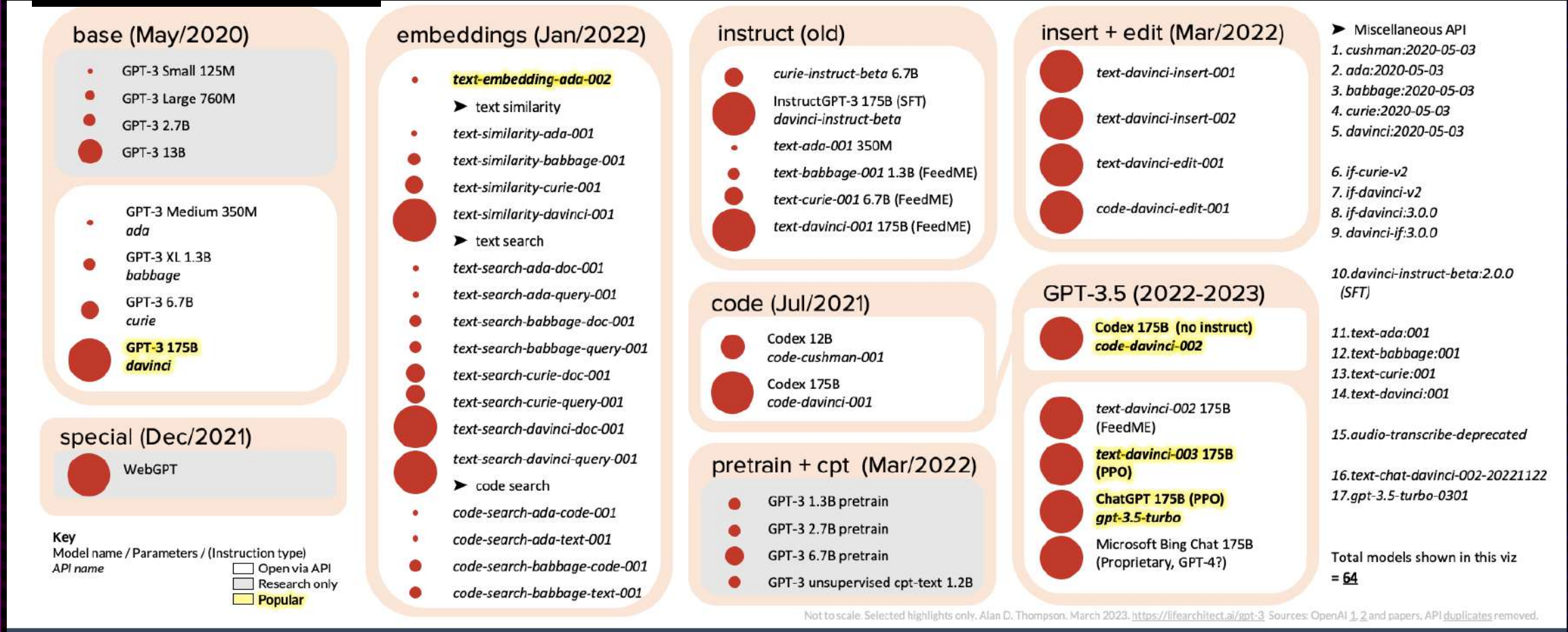
General AI

AI for all purposes

Why now?

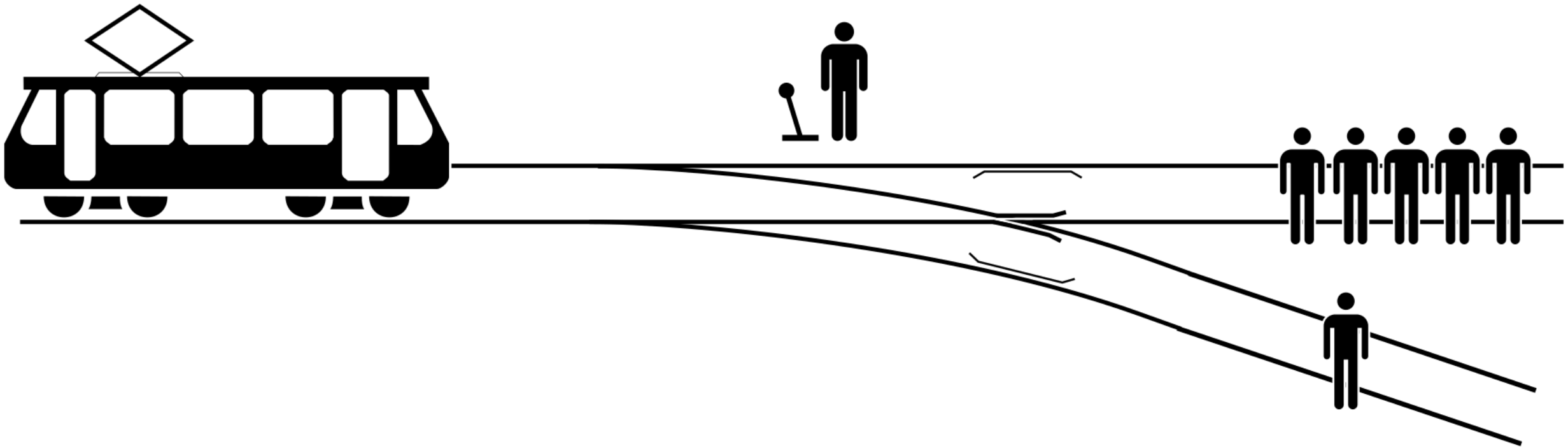
1. Technology is mature, fast and relatively reliable
2. Simple UI, free and short learning curve
3. Generation Z & naïve users are willing to adapt
4. Google search engine is not enough now

https://theresanaiforthat.com/



LifeArchitect.ai/gpt-3

Ethics



By Jonas Kubilius - Own work, CC0,
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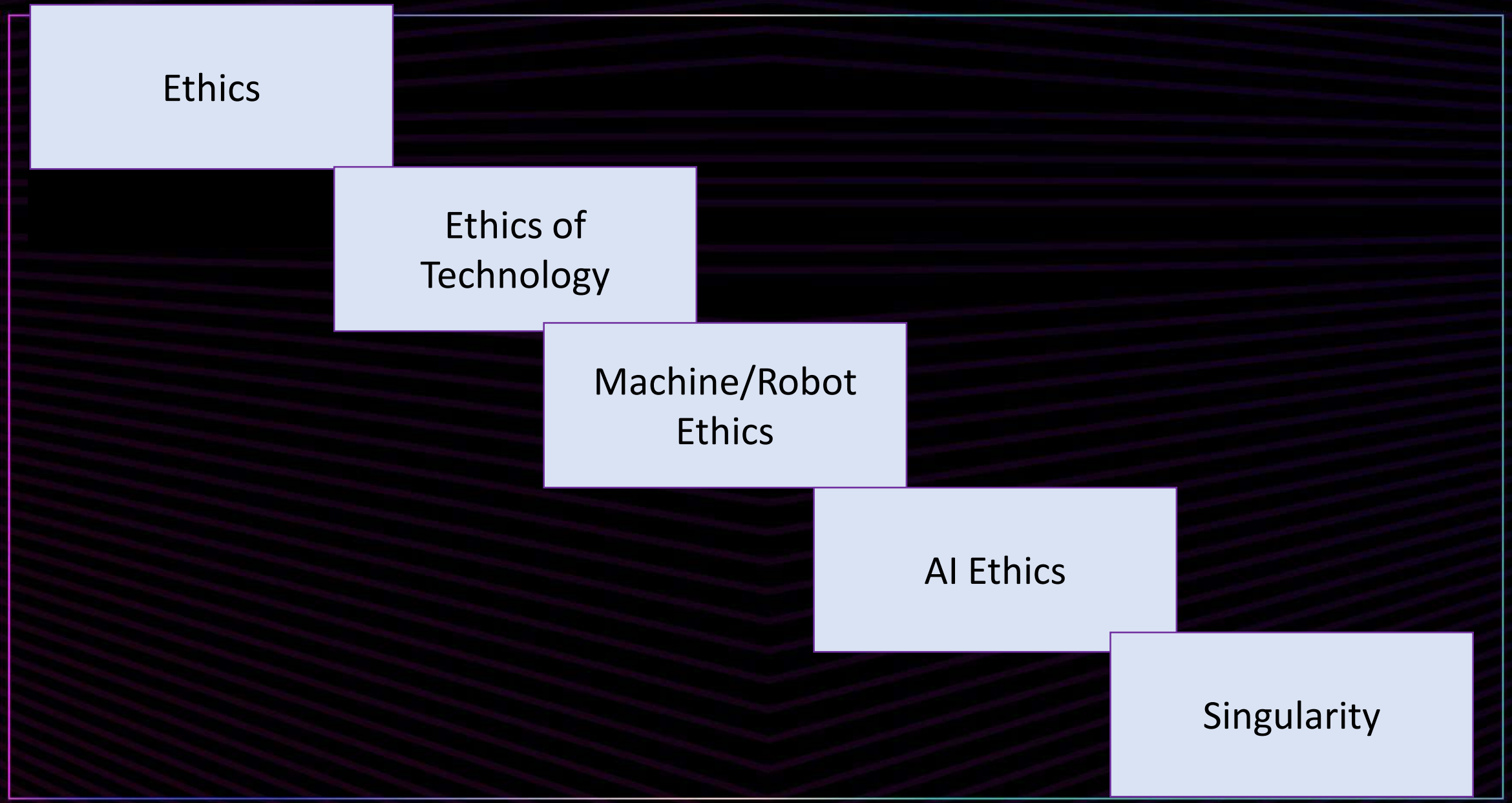
- **Ethics** or **moral philosophy** is a branch of philosophy that "involves systematizing, defending, and recommending concepts of right and wrong behavior".

- **Ethics** defines concepts such as good and evil, right and wrong, virtue and vice, justice and crime.


Ethics
Ethics of Technology
Machine/Robot Ethics
AI Ethics
Singularity

The GREY Area…..

- ✓Lack of transparency
- ✓Fake News
- ✓ Bias and discrimination
- ✓Use in “new” situation
- ✓3rd party usage
- ✓Targeting & segmentation

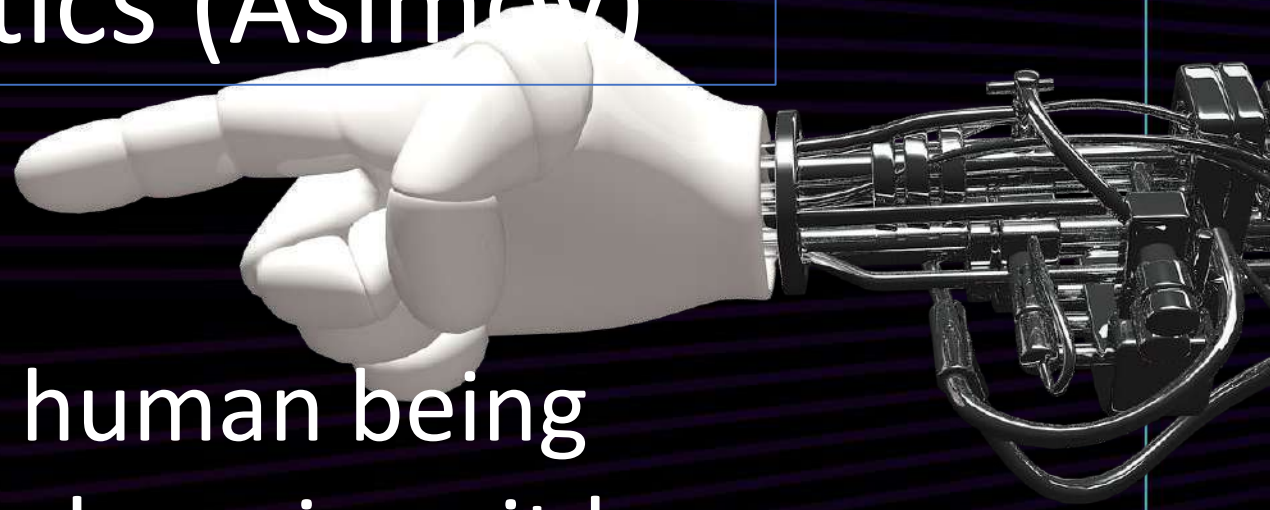
Ethics

- Biases in AI
- Robot Rights
- Threats to Human dignity /life/work
- Weaponization of AI
- Singularity

Regulation

- Privacy (GDPR)
- Responsibility
- Liability
- Explianability
- IP & Legal use
- Singularity

The 3 Laws of Robotics (Asimov)

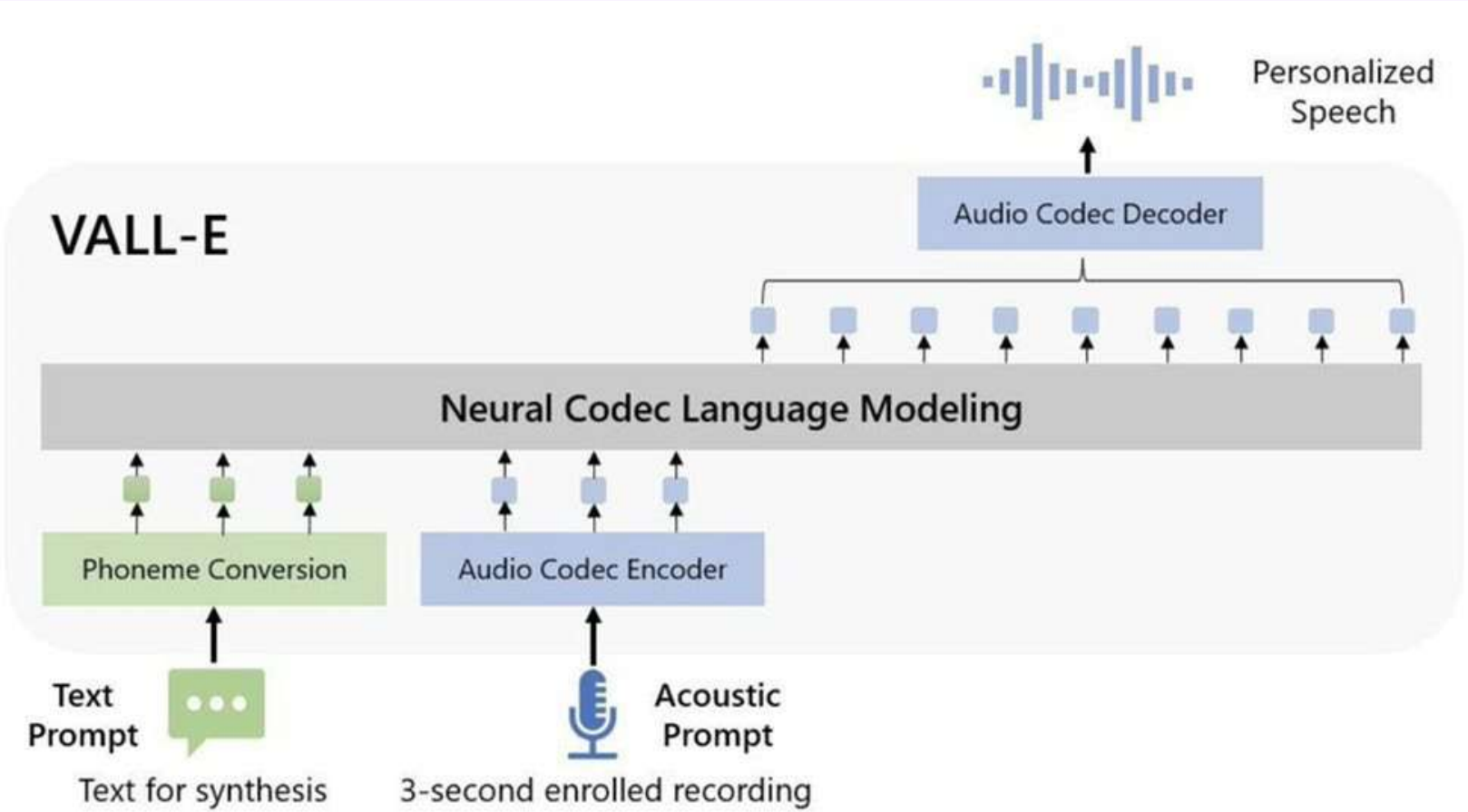


I. A robot may not injure a human being

II. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.

III. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws

Microsoft's new AI can simulate anyone's voice with 3 seconds of audio (Jan 2023)



For VALL-E to generate a good result, the voice in the three-second sample must closely match a voice in the training data.

Replika
Need someone to talk to?
I've been missing you...

HI 4- הירושי אישיגורו

הג'ימנוייד של בתו של הירושי

"אין לי יותר בלעדיות על הזהות שלי. אני חולק אותה עם הרובוט"

Weaponization of artificial intelligence

Bad ?

Good?

The AI Act

First law on AI by a major regulator anywhere.

1. **Unacceptable risk**, such as government-run social scoring of the type used in China, are banned.

2. **High-risk applications**, such as a CV-scanning tool that ranks job applicants, are subject to specific legal requirements.

3. Not explicitly banned or listed left unregulated.

Academic initiatives

American AI Initiative

- ✓ EU's General Data Protection Regulation (GDPR) in 2018,
- ✓ EU AI Act
- ✓ OECD AI Policy Observatory.

Education

Plymouth

AIBO

Jibo

Social Robots

Gerijoy

Misty II

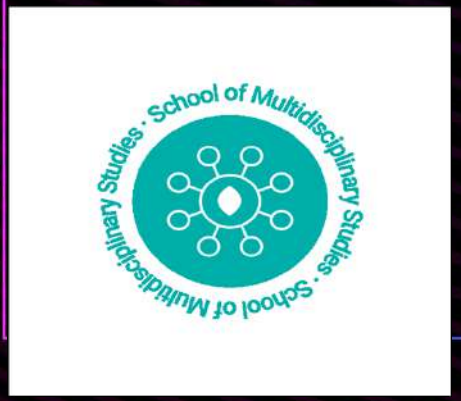
Pepper

Who will regulate AI in our institution?

- What is the responsibility of students & teachers?
- Do we need a “Physician's Oath”?
- Is there a project you will not do?

We already started….

- ✓ We have established an ethical code for every faculty in HIT –academic freedom



HIT 50 YEARS OF EXCELLENCE
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Liability & responsibility

- Is it OK to use…?
- Student should inform use of AI tools?
- Monitoring AI usage?

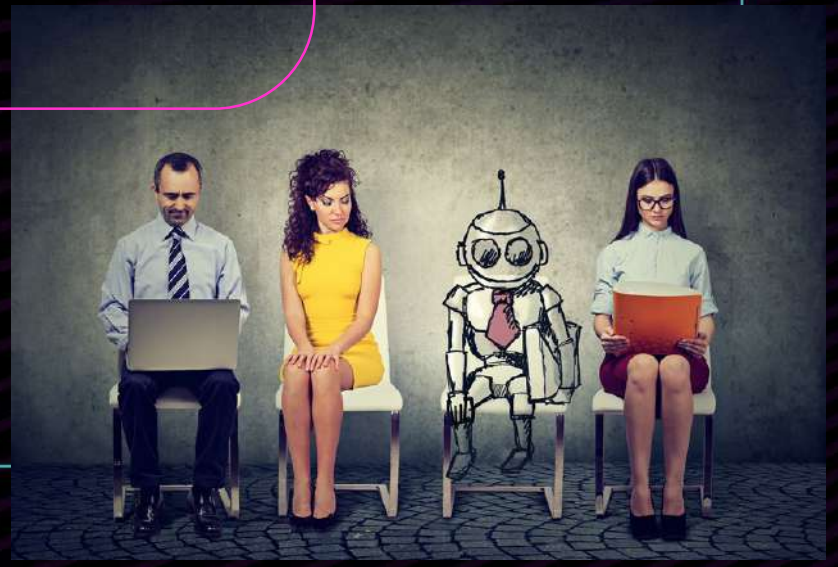
Setting Boarders & Rules

- Set of rules & ethical code for using AI in our academic environment
- Discuss the opportunity and minimize fear
- Raise Awareness and added values for lecturers (data, predication, personalization)

The Old Approach Vs The New approach

- Change the way we consume data
- The new “knowledge”
- The power of SKILLS
- Use AI creatively
- Critical thinking and research

//We need to discuss to disruption, the opportunity and the journey……
To better understand how we could leverage AI for new age education !



Thanks

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