

The future of
Software
Engineering
in the time of AI

Letizia Jaccheri – 29th February 2024

Catch IDI 2024

TDT4290 Customer Driven Project



Politecnico
di Torino

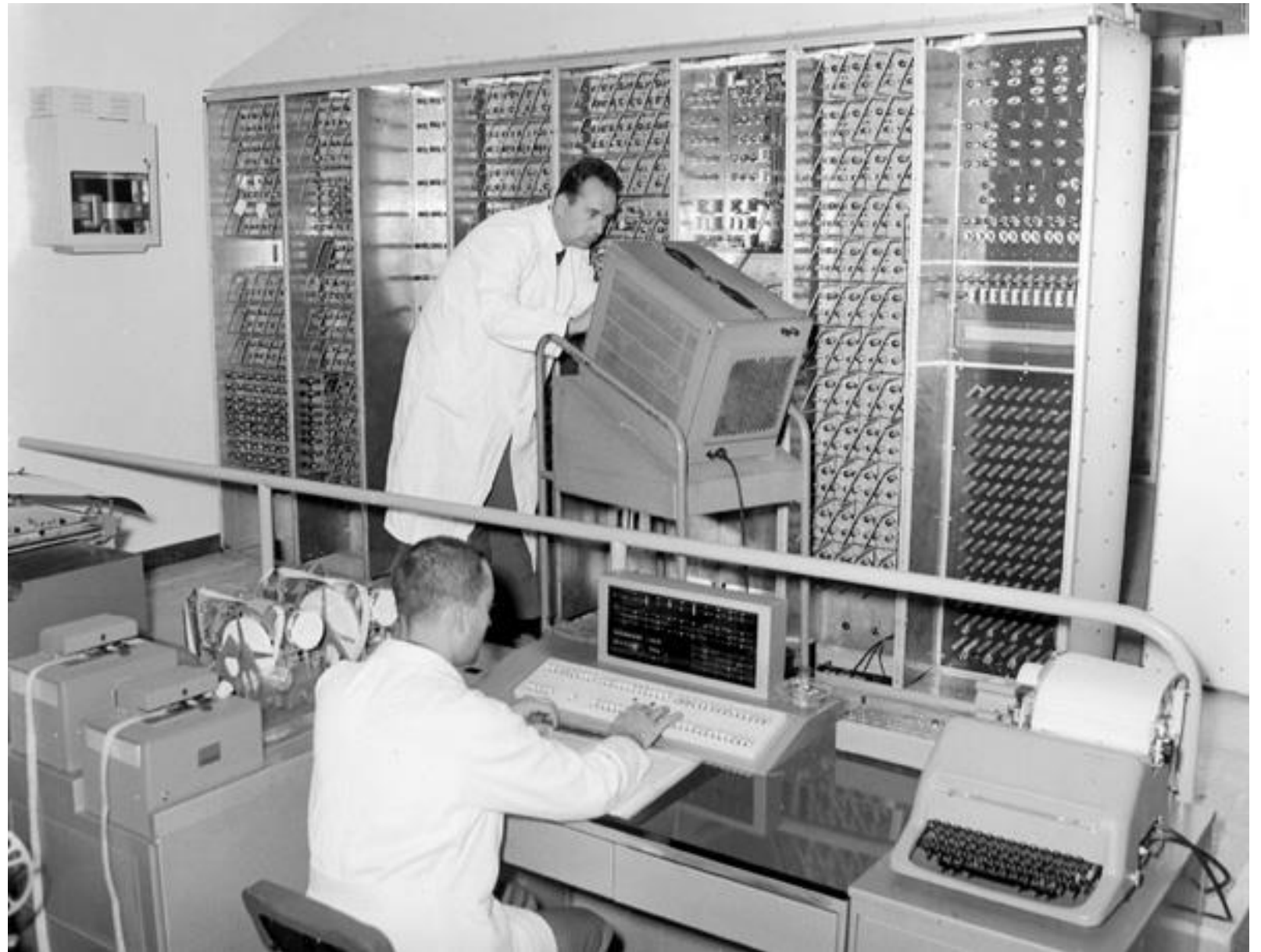


NTNU

Norwegian University of
Science and Technology

Once upon a time
in 1960 the first
Italian
computer was
built in Pisa
around 1960

36 Kbyte – now 8 Giga
 10^4 flops – now 10^{17}





Letizia Jaccheri www.letiziaccheri.org is a computer scientist. Letizia is born in Pisa. She has been professor at NTNU since 2002 and since 2013 she acts as department head for NTNU's Department of Computer and Information Science.

The Little Doormaid

TAPPETINA



Letizia Jaccheri



<https://www.ntnu.no/ansatte/letizia.jaccheri>

letiziaccheri.org

Margaret Hamilton born 1936
the first person who coined the
term software engineering and
who wrote the software for
Apollo expedition in the 60's

The first software engineering
conference was held in 1968



December 2023, I asked OPENART to draw 4 software engineers and this is what I get <https://openart.ai/create>



Computer science: algorithms,
programming, artificial intelligence,
architecture, graphics, security, databases,
human computer interaction, information
systems, operating systems, software
engineering

Software engineering is an engineering-based approach to software development

AI stands for a computer system that performs tasks that typically require human intelligence, such as recognizing speech, making decisions, and identifying patterns

- Software engineering was founded as an academic discipline in 1968
- SE is a field of study in CS
- SE studies how humans cooperate to conceive , develop, test software technology
- Artificial intelligence was founded as an academic discipline in 1956
- AI is a field of study in CS
- AI develops and studies intelligent machines

Research methods:

The human is at the center, sociology, psychology

The science of software

Generative create new content (audio, code, images, text, video)

AI automatically using a computer

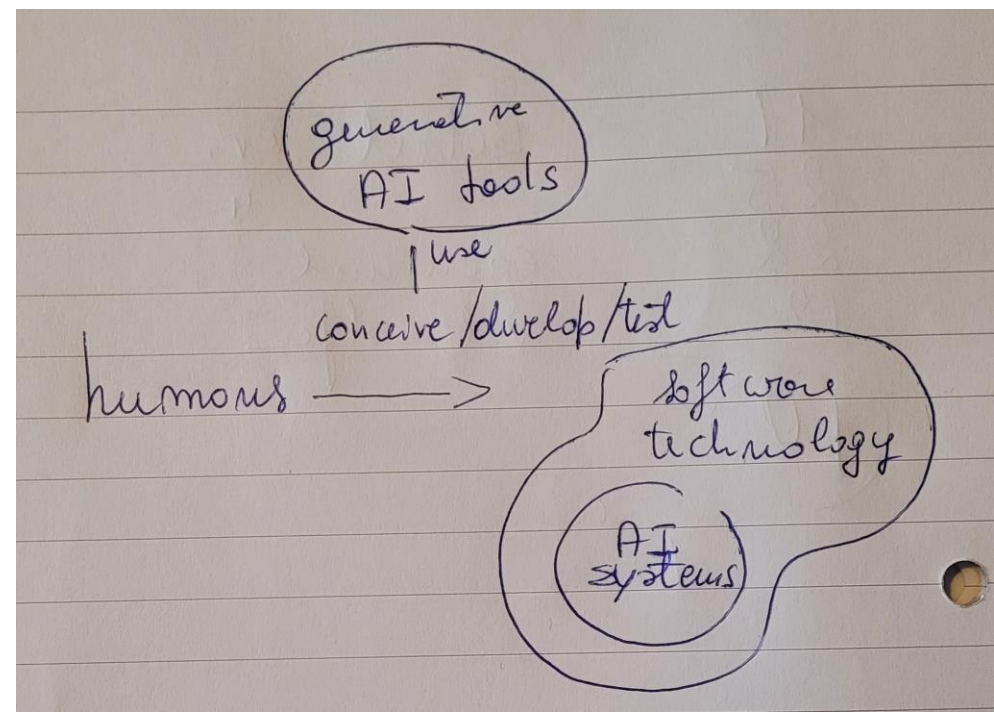
JOBBER MOT KJØNNSGAPET I IT

- Det bør ikke være lov å lage KI-systemer uten kvinner

Professor Letizia Jaccheri er livredd for hvordan kunstig intelligens (KI) nå utvikles.

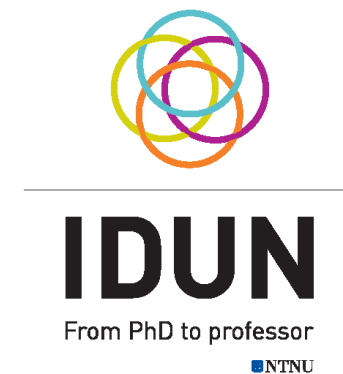


Letizia Jaccheri er pådriver for teknologi-konferansen Womencourage. Hun mener at hvis vi skal løse de store utfordringene, som miljø, klima og krig, må hele befolkning være med. Foto: Benedikt Erikstad Javorovic





Thanks to



Jingyue Li

