

From Campus to Impact: *Your journey starts here*

Ender Yüksel, PhD

Director of Engineering, SimCorp

About the Speaker



Ender Yüksel

Director of Engineering, SimCorp

Member of Examiners in Computer Science
Soon-to-be Lecturer at CBS

Former Software Engineer, Danske Bank
Former Postdoctoral Researcher, DTU
Former PhD Student, DTU
Former Research Assistant, ITU
Former IT Consultant, Akbank

Who is SimCorp?

SimCorp is the world's leading provider of integrated investment management solutions.

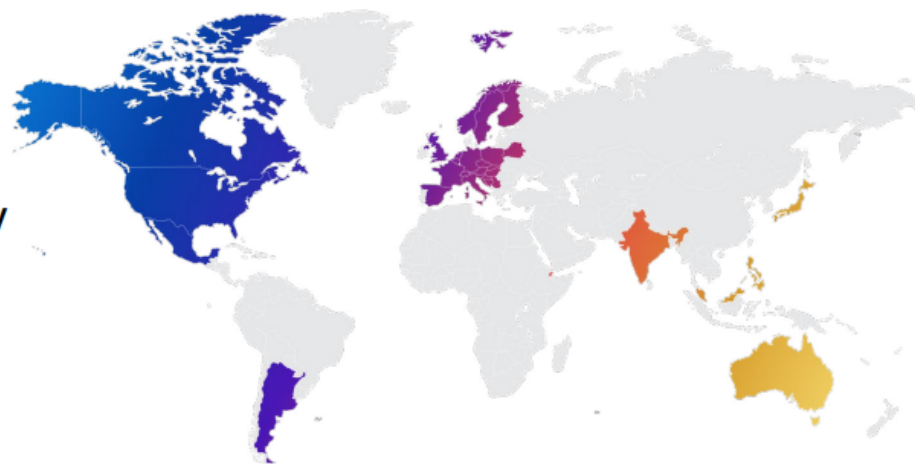
50+

years supporting
the investment management
industry

Around
20%
of revenue invested
in R&D

More than
24,000
SimCorp
Dimension® users

More than
32
offices globally



More than
300
SimCorp
Clients

UBS | Franklin Templeton | Fannie Mae | Bank of Thailand |
BMO | Aegon | Asset Management One | Storebrand Asset
Management | Swisscanto | Lupus alpha | LIM Advisors Ltd. |
Novo Holdings | Folketrygd-fondet | Unigestion | Colonial First
State | The State Oil Fund of Azerbaijan | CNP Assurances |
MEAG | Swiss Life | UNIQA | VidaCaixa | Generali | AXA
Investment Managers | Elo Mutual Pension Insurance | AIMCo |
OTPP | CPPIB | PSP Investments | ATP | MN | Achmea | PGGM |
BCIMC | OPERS | KAS BANK | Finanz Informatik | Universal-
Investment-Labs | Edmond de Rothschild Asset Management |
Societe Generale Securities Services | and more...

SimCorp 5Cs

The DNA of our culture comes from our 5Cs values that help us navigate how we work together, make decisions, and succeed.



CARING

We are genuinely interested in our colleagues, customers, and stakeholders – making time to listen to and actively support each other.



CUSTOMER SUCCESS DRIVEN

We put our customers at the center of what we do - being active partners and understanding how to enable valuable customers.



CURIOUS

We are curious when we learn, explore, and grow – always seeking to innovate the solutions and services provided.



COLLABORATION

We collaborate with trust, integrity, and respect - connecting across internal and external boundaries to lessen them.



COURAGEOUS

We speak up, make bold decisions, and take risks – handling ambiguity and uncertainty to transform ideas and strategies into action.



**At SimCorp,
we view diversity as
a strategic priority.**



With over 70 nationalities at **SimCorp**, we have a multinational environment where our core values stay the same but are enhanced with local flavors. We learn from and challenge each other, believing that the differences that make us unique are also what bring us together.



Together, we can build a culture where everyone can thrive and be their true self.



About the Speaker - *revisited*

Ender Yüksel

PhD in Computer Science, DTU
including a research stay at Oxford
MSc in Computer Engineering, ITU
including a research stay at DTU
BSc in Computer Engineering, ITU



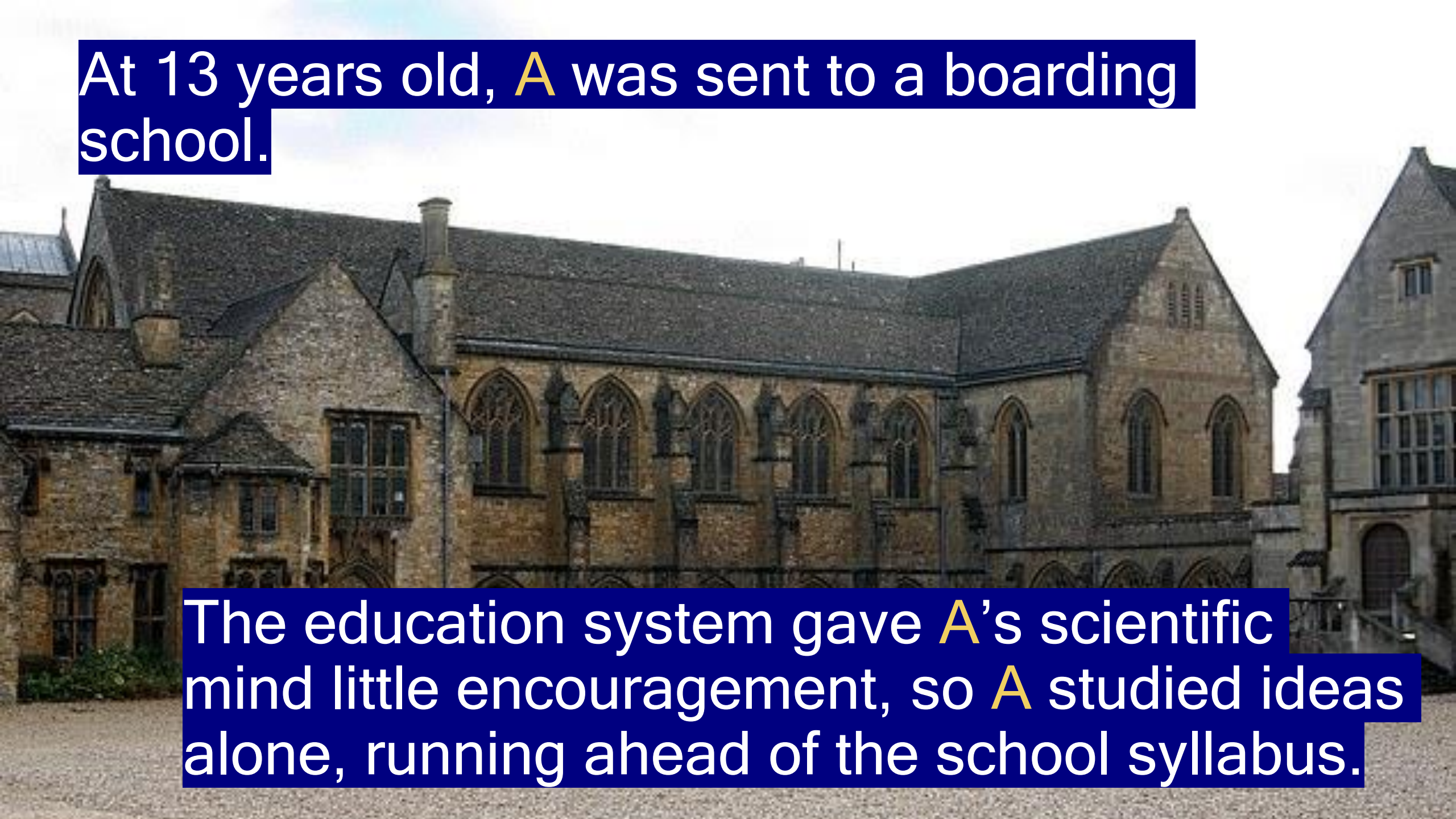
Story of A

Join at
slido.com
#3261 353



A spent much of childhood
separated from parents.

At 13 years old, A was sent to a boarding school.



The education system gave A's scientific mind little encouragement, so A studied ideas alone, running ahead of the school syllabus.

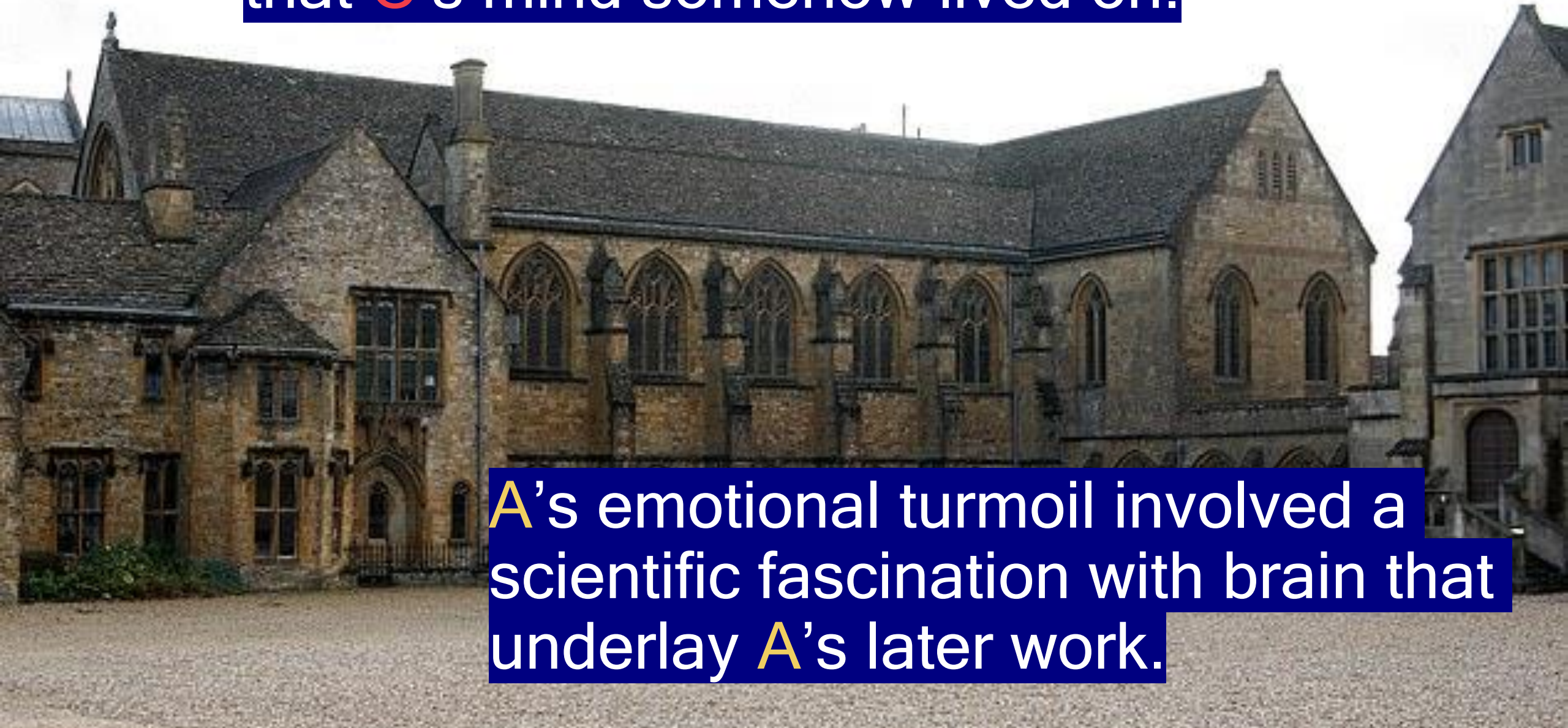
Soon after A fell in love with
another able pupil, C.



But C died suddenly from tuberculosis.

Devastated, **A** wanted to believe that **C**'s mind somehow lived on.

A's emotional turmoil involved a scientific fascination with brain that underlay **A**'s later work.

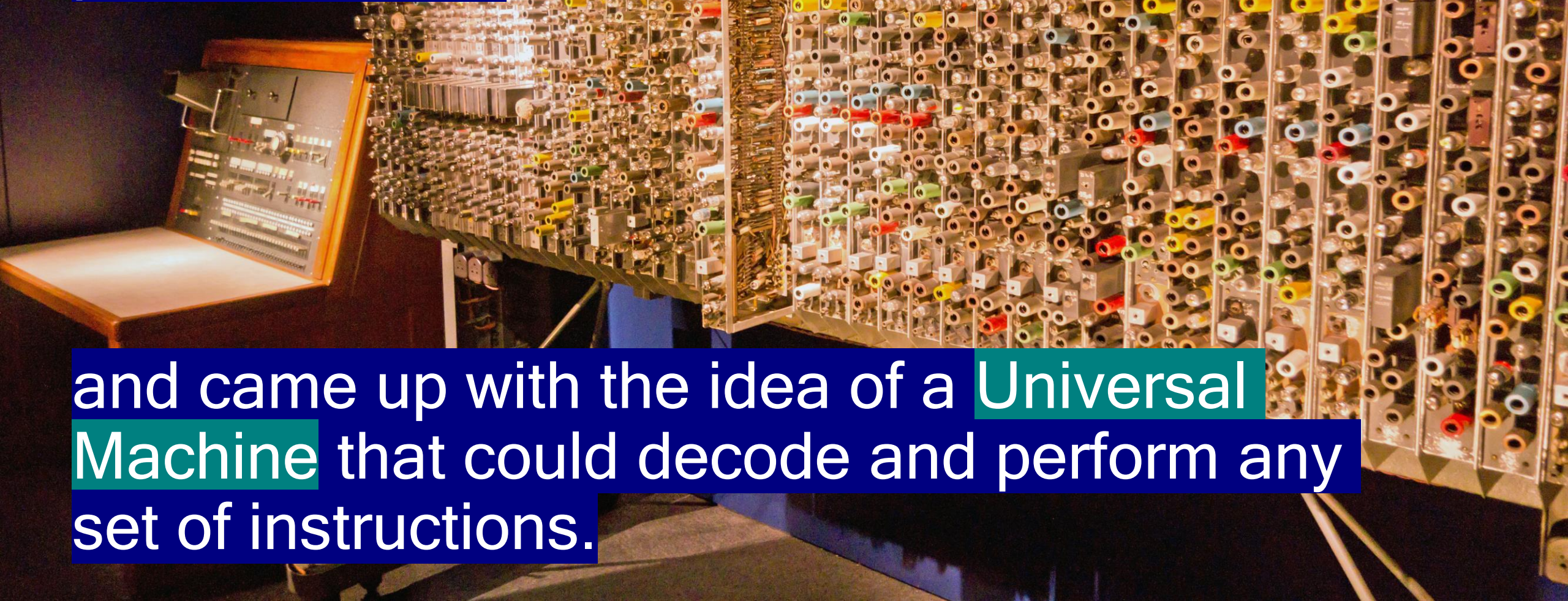




Several year later, A won a scholarship to Cambridge.

A thrived in a culture that encouraged his scientific interests

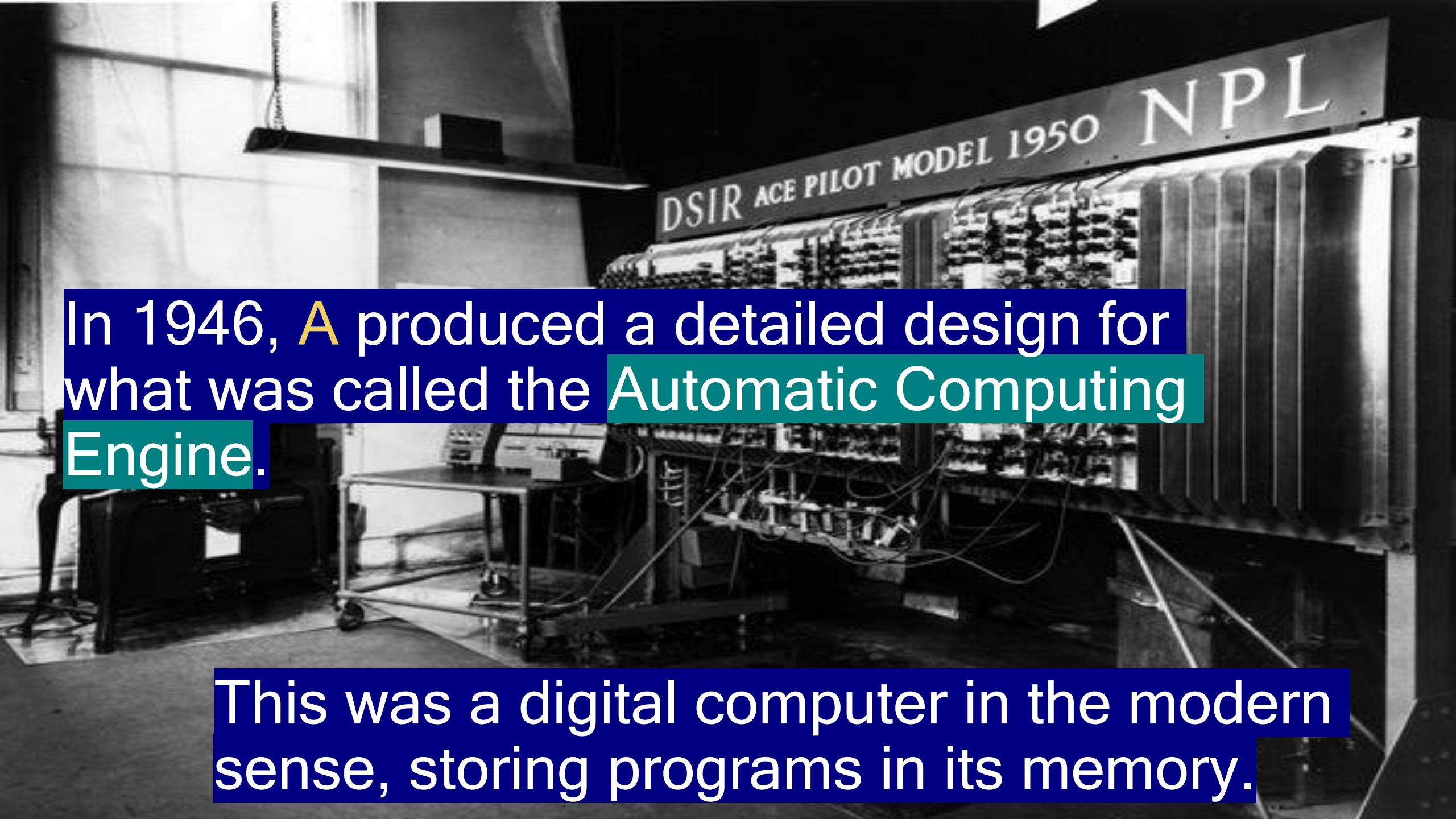
A analysed what it meant for a human to follow a definite method or procedure to perform a task.



and came up with the idea of a Universal Machine that could decode and perform any set of instructions.

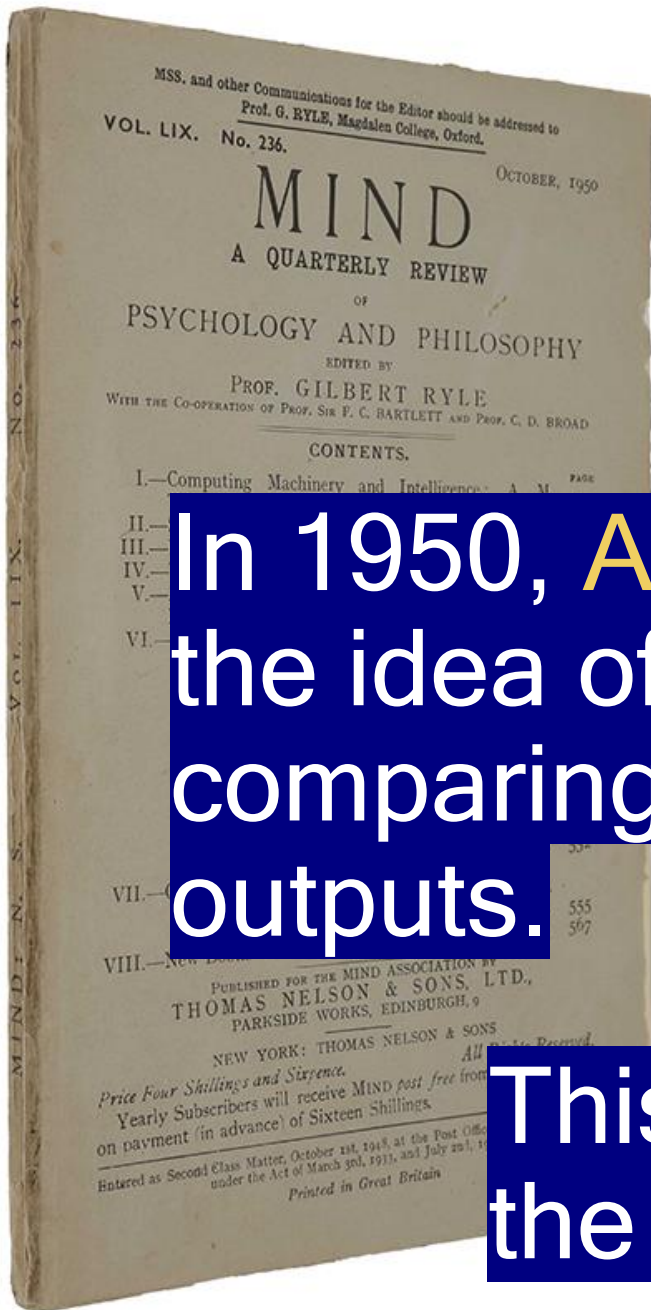
A large, complex mechanical cipher machine, likely a rotor-based machine, is shown in a room with brick walls and wooden paneling. The machine features a prominent grid of numerous rotors, each with a circular face displaying letters. The machine is housed in a metal frame with various cables and components visible. A text overlay is present in the lower-left quadrant.

Later on, A developed a machine capable of breaking ciphers on an industrial scale.



In 1946, A produced a detailed design for what was called the Automatic Computing Engine.

This was a digital computer in the modern sense, storing programs in its memory.



In 1950, A published a paper including the idea of an 'imitation game' for comparing human and machine outputs.

This remains A's key contribution to the field of Artificial Intelligence.

Could you guess, yet?

CHURCH-TURING THESIS

The Foundation of Computability Theory

What CAN and CANNOT be computed? 🤖



Turing Completeness

Relevance to programming languages: How can we measure the generality of a language? (One answer: by determining whether or not the language is "Turing complete.")



Turing Test

['tur-ɪŋ 'test]

A method to determine whether a machine can demonstrate human intelligence.

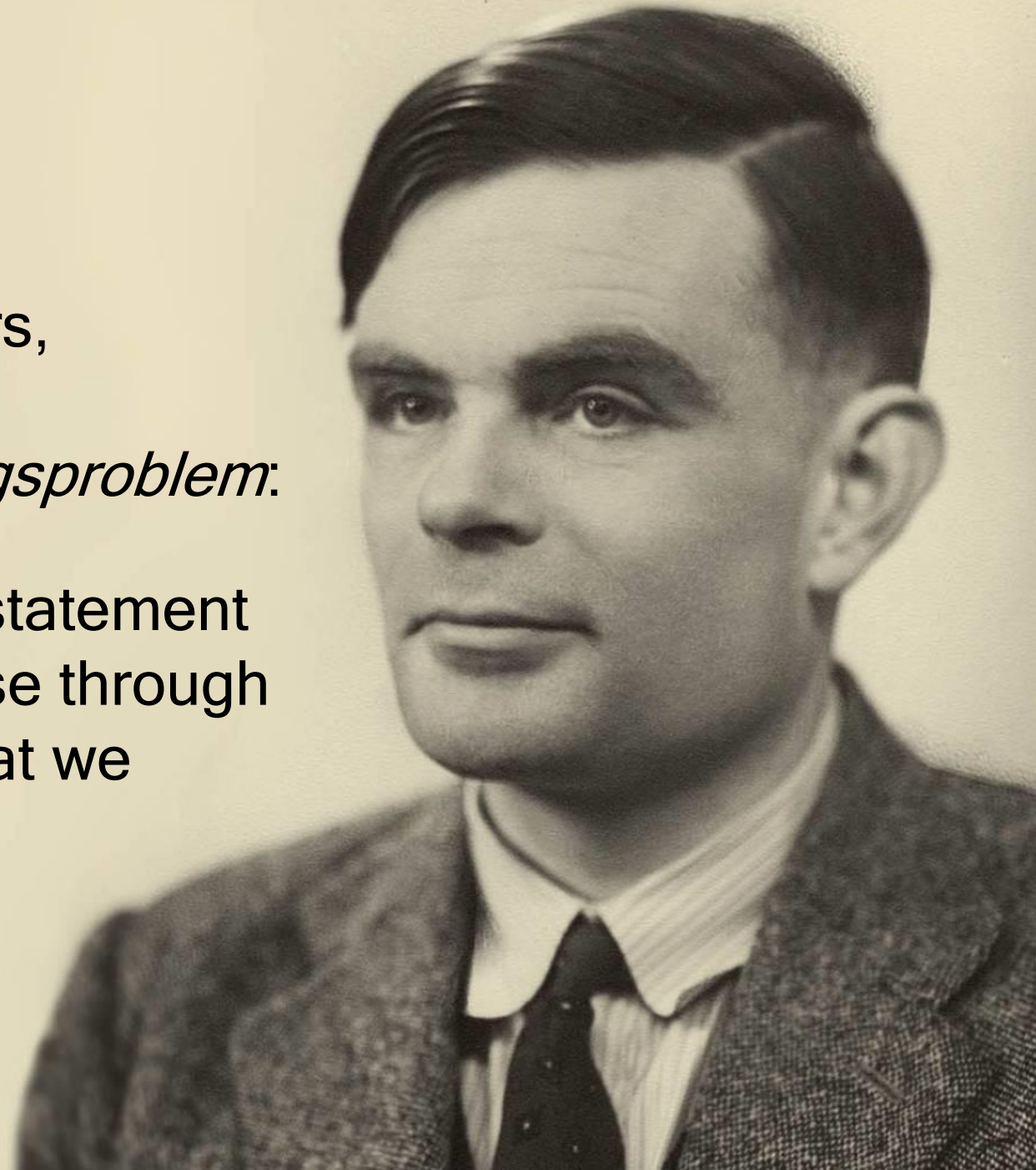


Alan Turing

Defined the foundations of computers,

in his attempt to solve *Entscheidungsproblem*:

determine whether any given statement
can be shown to be true or false through
a step-by-step procedure - what we
would call an algorithm today



Alan Turing

In 1947,
what would
Intelligence

COMPUTING MACHINERY AND INTELLIGENCE

by

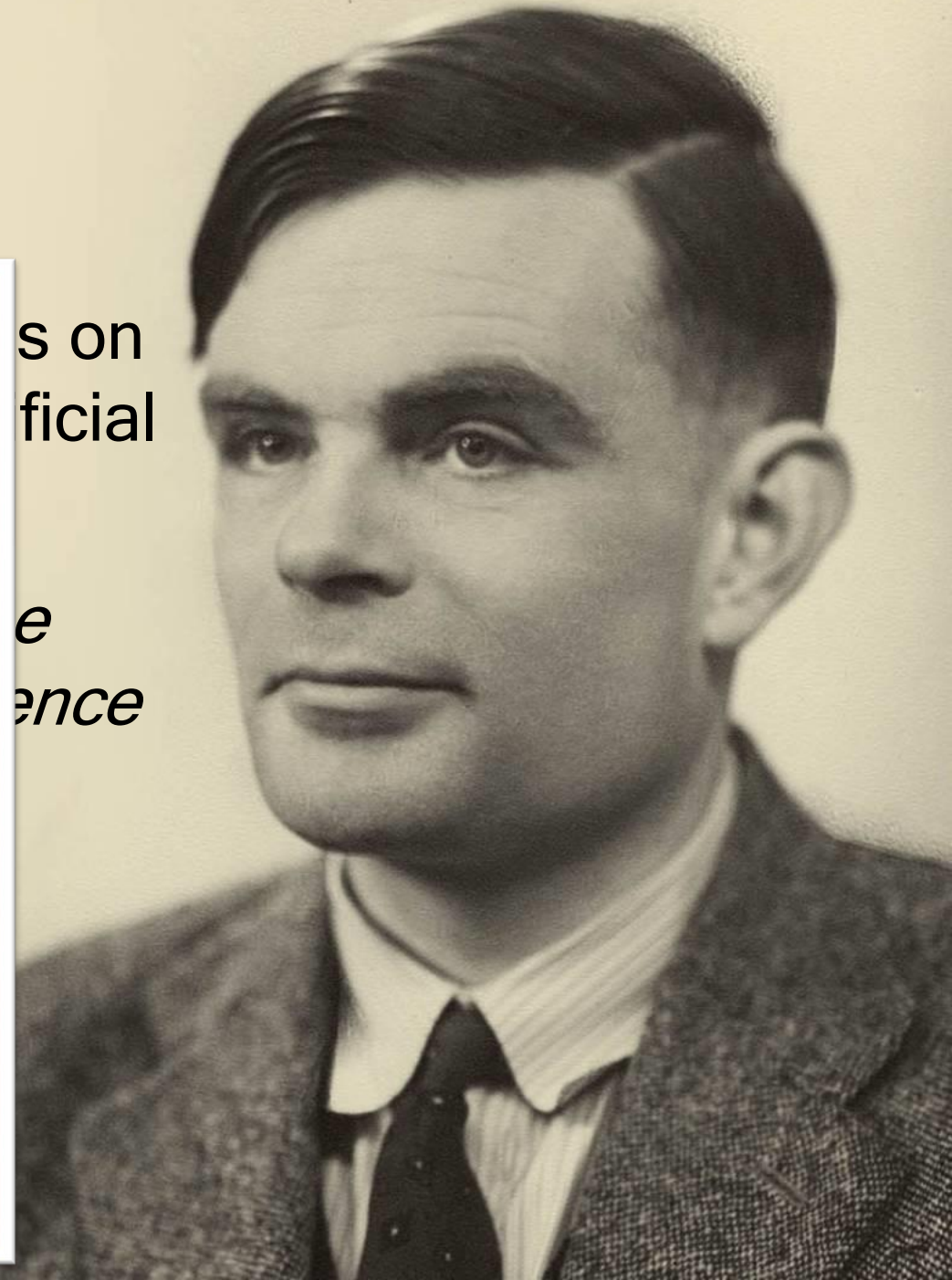
A. M. TURING.

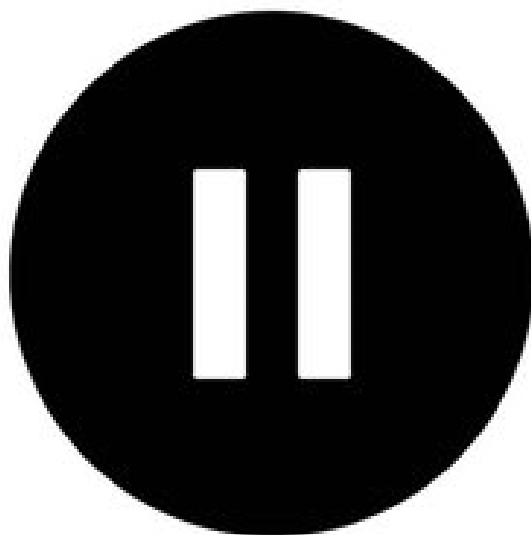
1. The Imitation Game.

I propose to consider the question, 'Can machines think?'. This should begin with definitions of the meaning of the terms 'machine' and 'think'. The definitions might be framed so as to reflect so far as possible the normal use of the words, but this attitude is dangerous. If the meaning of the words 'machine' and 'think' are to be found by examining how they are commonly used it is difficult to escape the conclusion that the meaning and the answer to the question, 'Can machines think?' is to be sought in a statistical survey such as a Gallup poll. But this is absurd. Instead of attempting such a definition I shall replace the question by another, which is closely related to it and is expressed in relatively unambiguous words.

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Four Lessons From Turing's Story

1

Don't underestimate the impact of your ideas.

Your ideas will solve real-world challenges.

2

Your time in this program is a chance to question assumptions and think beyond conventional wisdom.

3

You won't always have perfect data, perfect tools, or perfect conditions.

Great engineers succeed by innovating within constraints.

4

What you create during your studies — research, designs, code — could become the foundation for technologies that outlive you.



Story of M

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M started software development career with weather prediction.

L ASSEMBLY AND OPERATION INFORMATION

USER'S PAGE NO. 1

EO

R000001

R000002 *****

R000003 *

R000004 * THIS AGC PROGRAM SHALL ALSO BE REFERRED TO AS:

R000005 *

R000006 *

R000007 * COLOSSUS 2A

R000008 *

R000009 *

R000010 * THIS PROGRAM IS INTENDED FOR USE IN THE CM AS SPECIFIED

R000011 * IN REPORT R-577. THIS PROGRAM WAS PREPARED UNDER DSR

R000012 * PROJECT 55-23870, SPONSORED BY THE MANNED SPACECRAFT

R000013 * CENTER OF THE NATIONAL AERONAUTICS AND SPACE

R000014 * ADMINISTRATION THROUGH CONTRACT NAS 9-4065 WITH THE

R000015 *

R000016 *

R000017 *

R000018 *****

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DATE: 28 MAR 69
VELOPMENT

DATE: 28 MAR 69

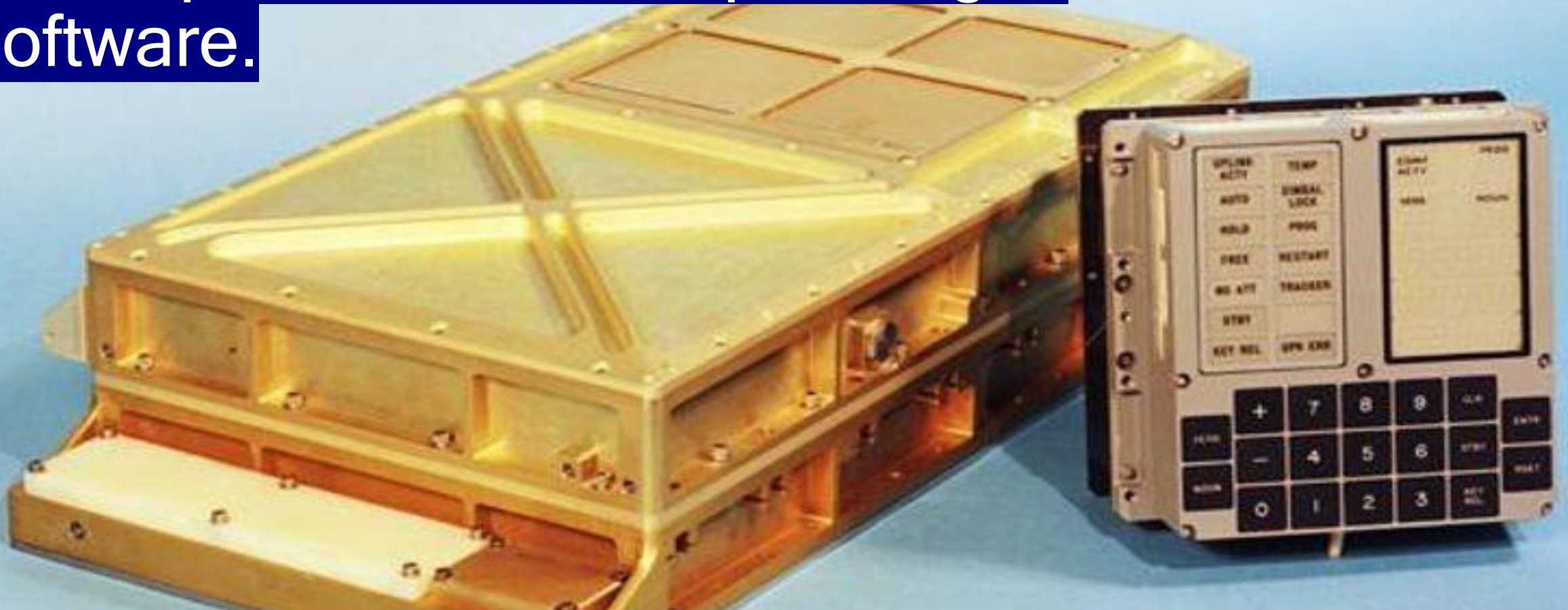
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Moved on to work with US Air Force to build software that can search for unfriendly aircrafts.

M became very successful in fixing and delivering highly complicated software.

As a result, **M** was selected as a developer for NASA's Apollo flight software.

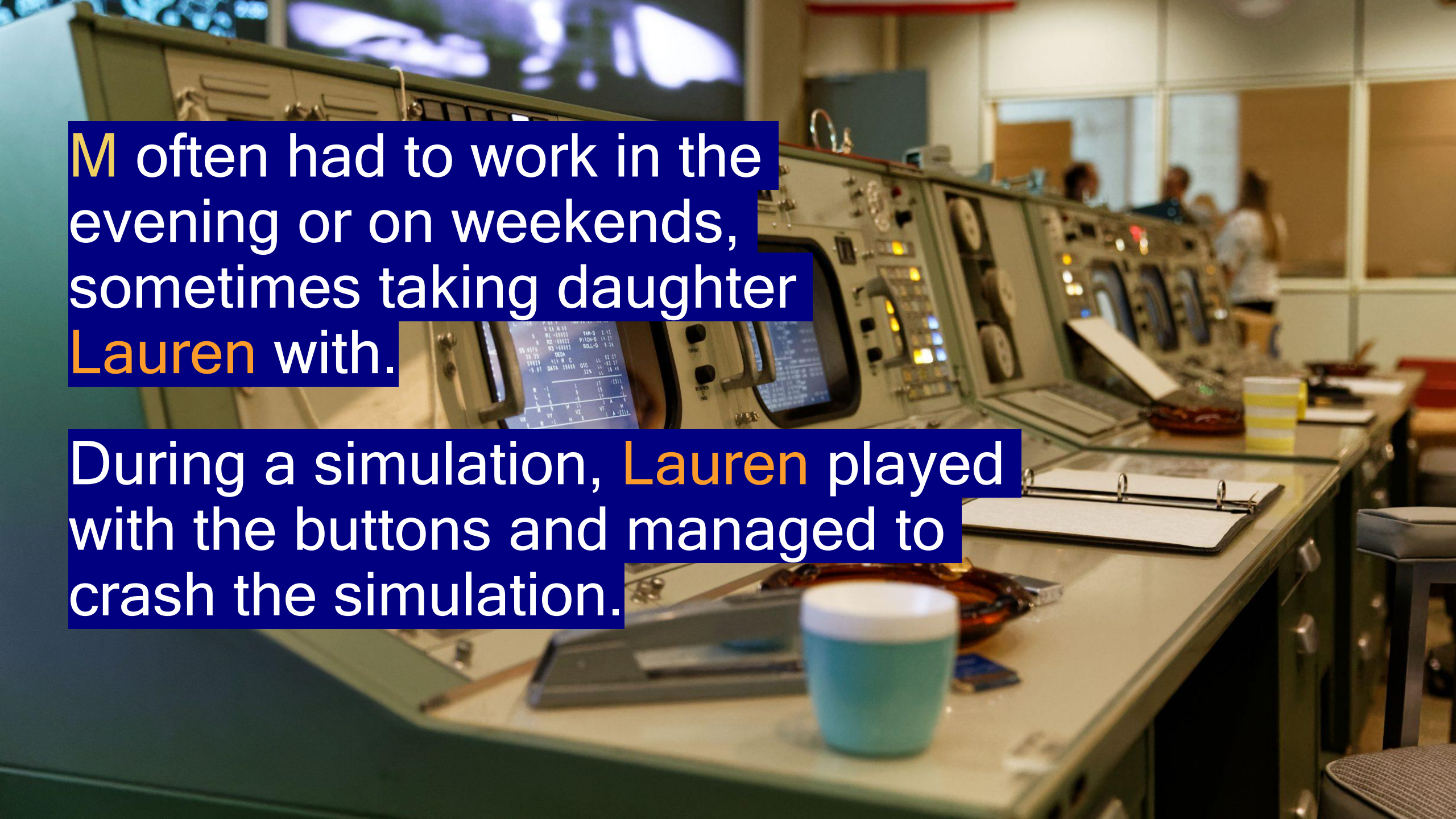


M's team wrote and tested all on-board in-flight software for the Apollo spacecraft.

Later, **M** also developed error detection and recovery software for Apollo.

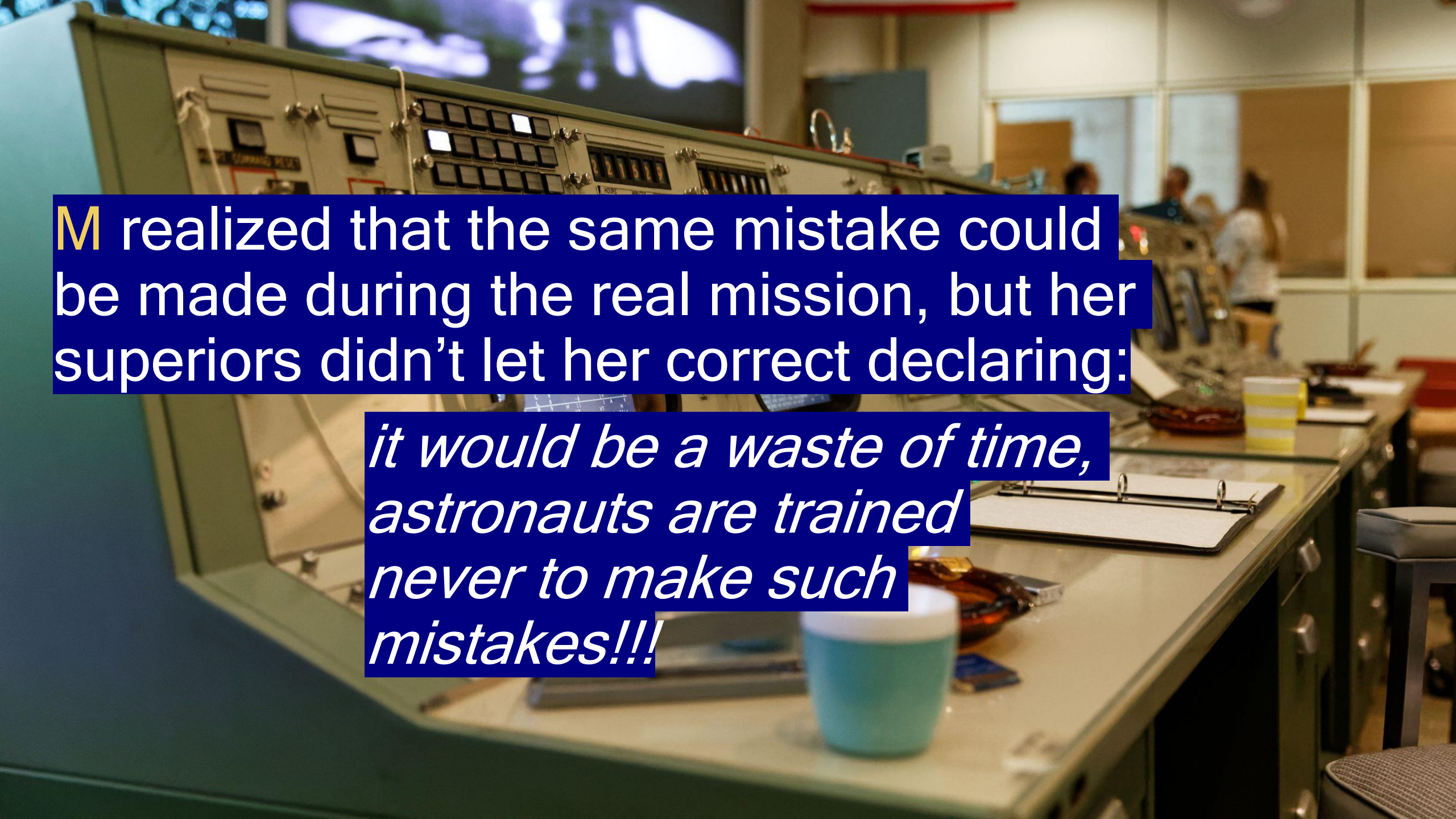


This software famously avoided possible disasters in Apollo 11 moon landing.

A photograph of a control room, likely for an aircraft simulator. In the foreground, a console features a small screen displaying technical data, including 'YAW-D', 'PITCH-D', and 'ROLL-D' values. The background shows a long row of similar consoles with various buttons, switches, and larger monitors. Several people are visible in the background, working at the consoles. The room has large windows on the right side.

M often had to work in the evening or on weekends, sometimes taking daughter **Lauren** with.

During a simulation, **Lauren** played with the buttons and managed to crash the simulation.



M realized that the same mistake could be made during the real mission, but her superiors didn't let her correct declaring:

*it would be a waste of time,
astronauts are trained
never to make such
mistakes!!!*

A photograph of the lunar surface with a cratered horizon. In the upper left, a portion of the Apollo Lunar Module is visible, featuring a "UNITED STATES" flag. In the upper right, the Earth is visible as a small blue and white sphere against the black sky.

Soon in a real mission, a similar scenario happened.

After that incident, **M** was allowed to change the software so it would overrule the pilot in emergencies.



CELEBRATING

M not only contributed heavily to the profession, but also named the profession of **Software Engineering**.

YEARS OF
SOFTWARE ENGINEERING

Could you guess, yet?

Margaret Hamilton

Not only coined the term
Software Engineering,

also made it clear that it is as
important as hardware or
other engineering disciplines.

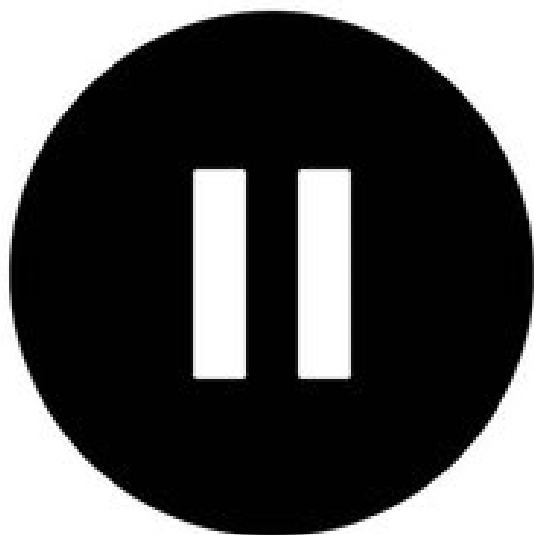


Margaret Hamilton

Great role model for women in STEM.

Proved that women belong at the heart of engineering and innovation.





Four Lessons From Hamilton's Story

1

Take Your Work Seriously
Even If Others Don't Yet

2

Prepare for the Unexpected

3

Challenge Norms

4

What you create during your studies — research, designs, code — could become the foundation for technologies that outlive you.

And here is your



from this talk

You are in ~~good~~
best hands

We (and the rest of the world) need the
skills that you will acquire

This field, shapes the future

THANK YOU



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