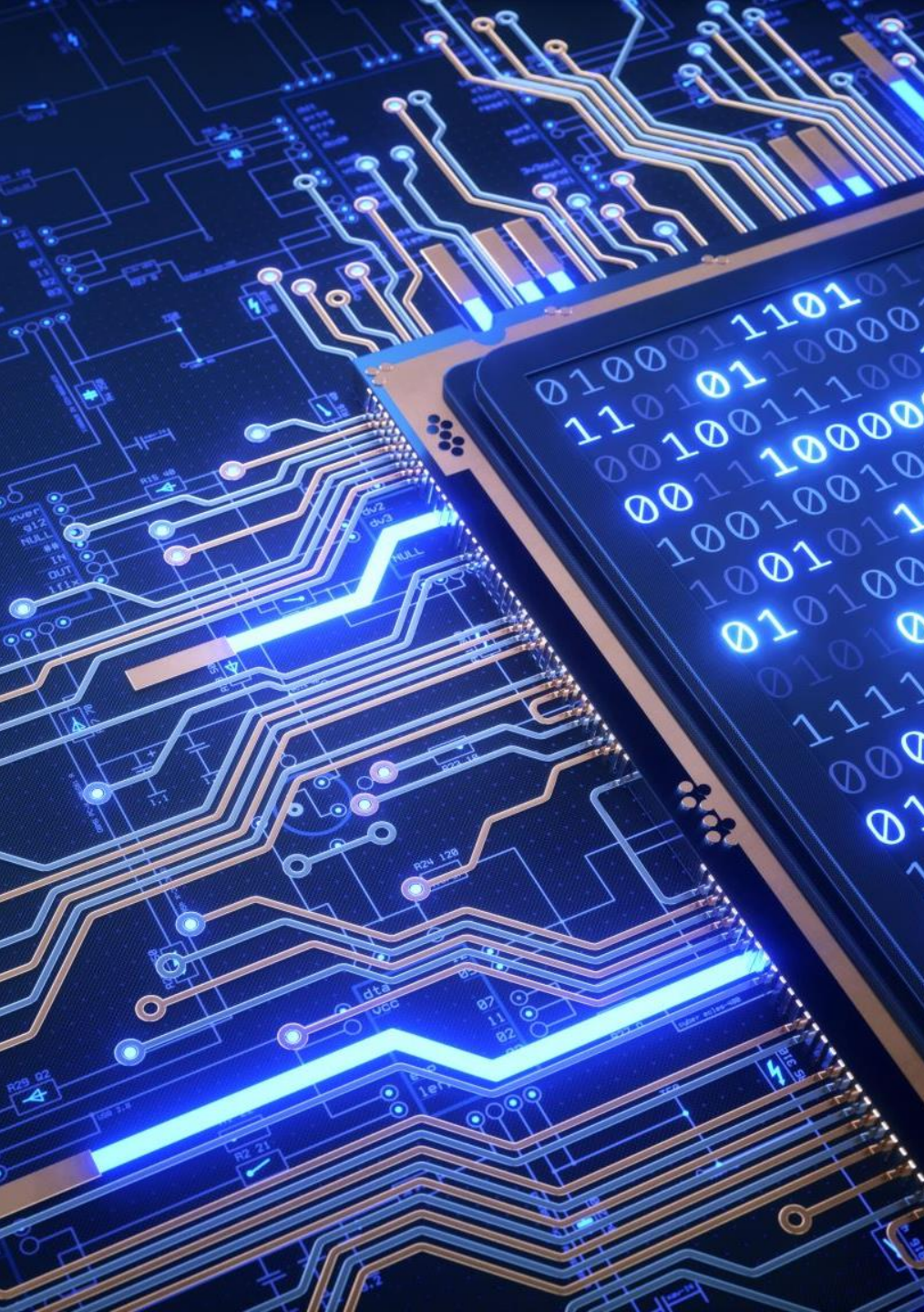


Making of Artificial Intelligence

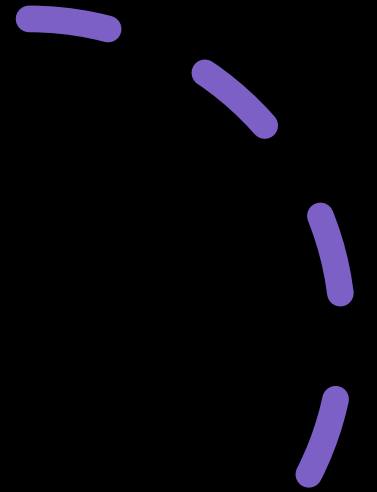
Presentation by:
Shayan Bakht





Overview

1. Introduction
2. History and AI's Origin
3. Turing's Test
4. Logic Theorist
5. Dartmouth Conference





“

It seems probable that once the machine thinking method had started, it would not take long to outstrip our feeble powers... They would be able to converse with each other to sharpen their wits. At some stage therefore, we should have to expect the machines to take control.

- *Alan Turing*
in 1951

History and AI's Origin

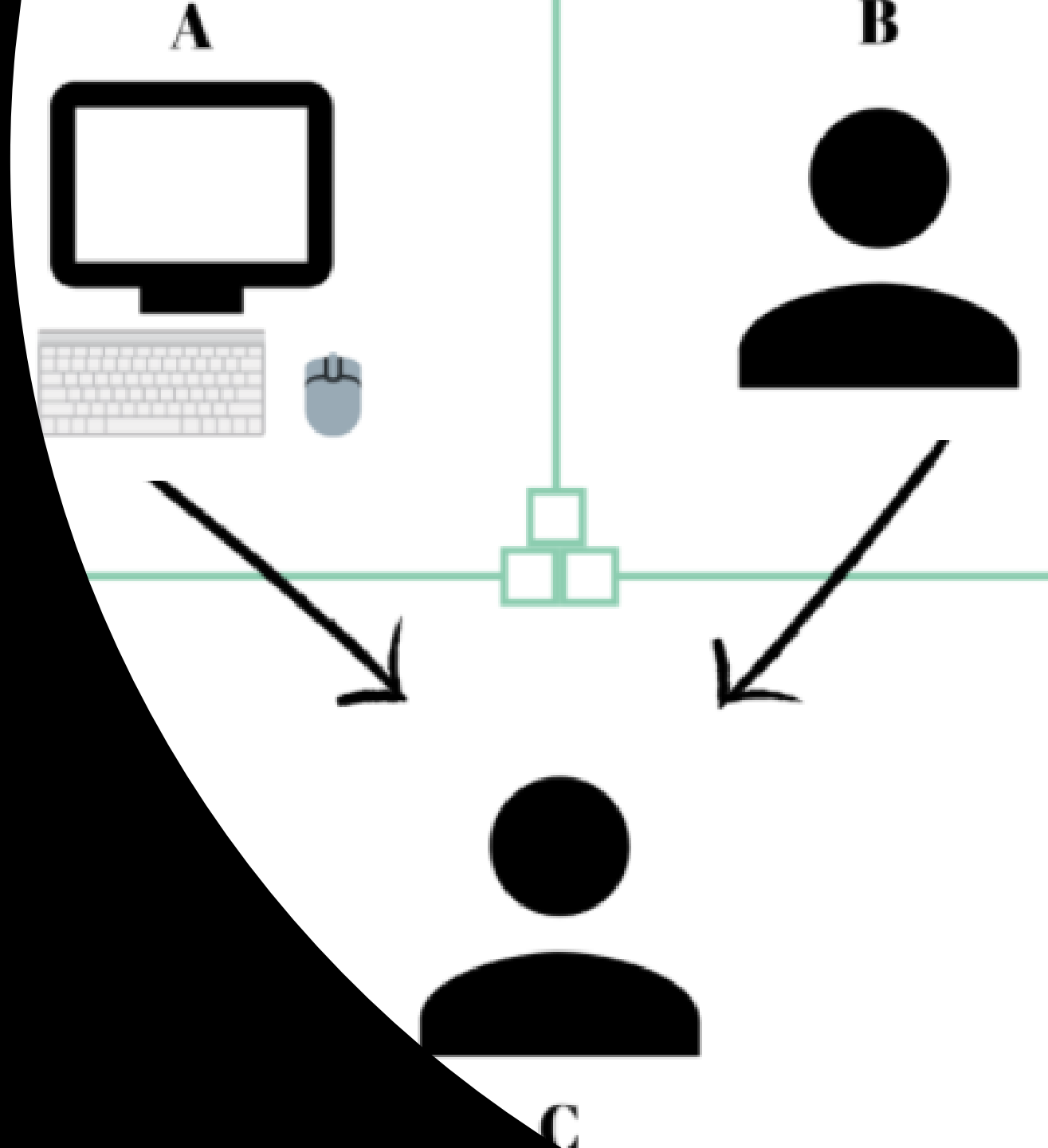
(early 1800's and the early 1950s)

- Function of human brain (neurons)
- Norbert Wiener's Cybernetics (1948)
- Claude Shannon's Information theory (1948)
- Alan Turing's theory of computation

“Possibility to construct an electronic brain”

Turing's Test

- A **Turing Test** is a method of inquiry in artificial intelligence (AI) for determining whether a computer is capable of thinking like a human being.
- The ability of a machine to remain indistinguishable for a conversation.
- First “Serious” proposal in the philosophy of artificial intelligence





Logic Theorist

- Created in 1955 by Allen Newell and Herbert A. Simon
- The First AI program
- Program engineered to perform automated reasoning
- Proved 38 of first 52 theorems in “Principia Mathematica”

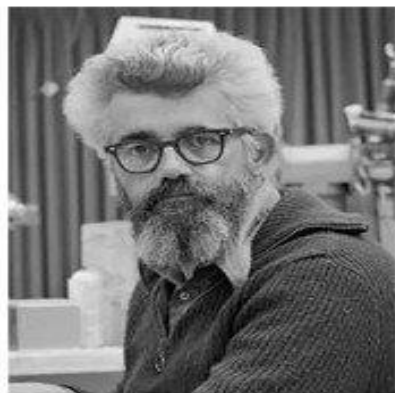


Dartmouth Conference (1956)

- “Every aspect of learning or any other feature of intelligence can be so precisely described that a machine can be made to stimulate it”
- Birth of AI
- Logic theorist was presented to the public
- Name “Artificial Intelligence” was adopted



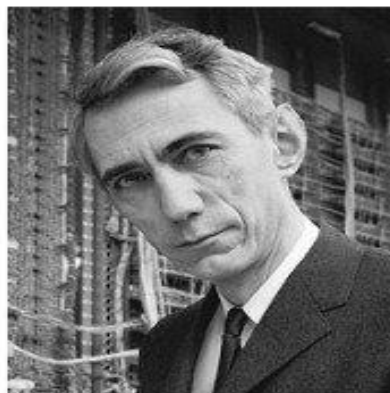
1956 Dartmouth Conference: The Founding Fathers of AI



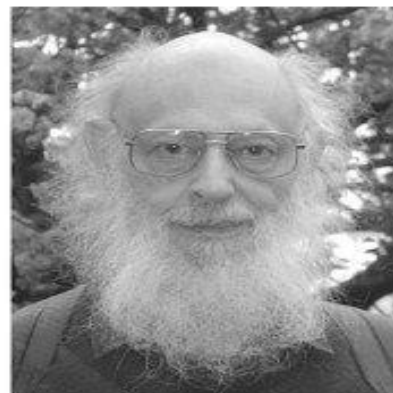
John MacCarthy



Marvin Minsky



Claude Shannon



Ray Solomonoff



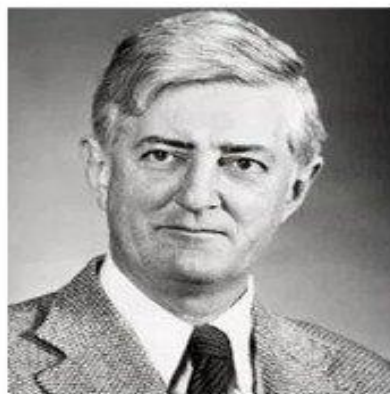
Alan Newell



Herbert Simon



Arthur Samuel



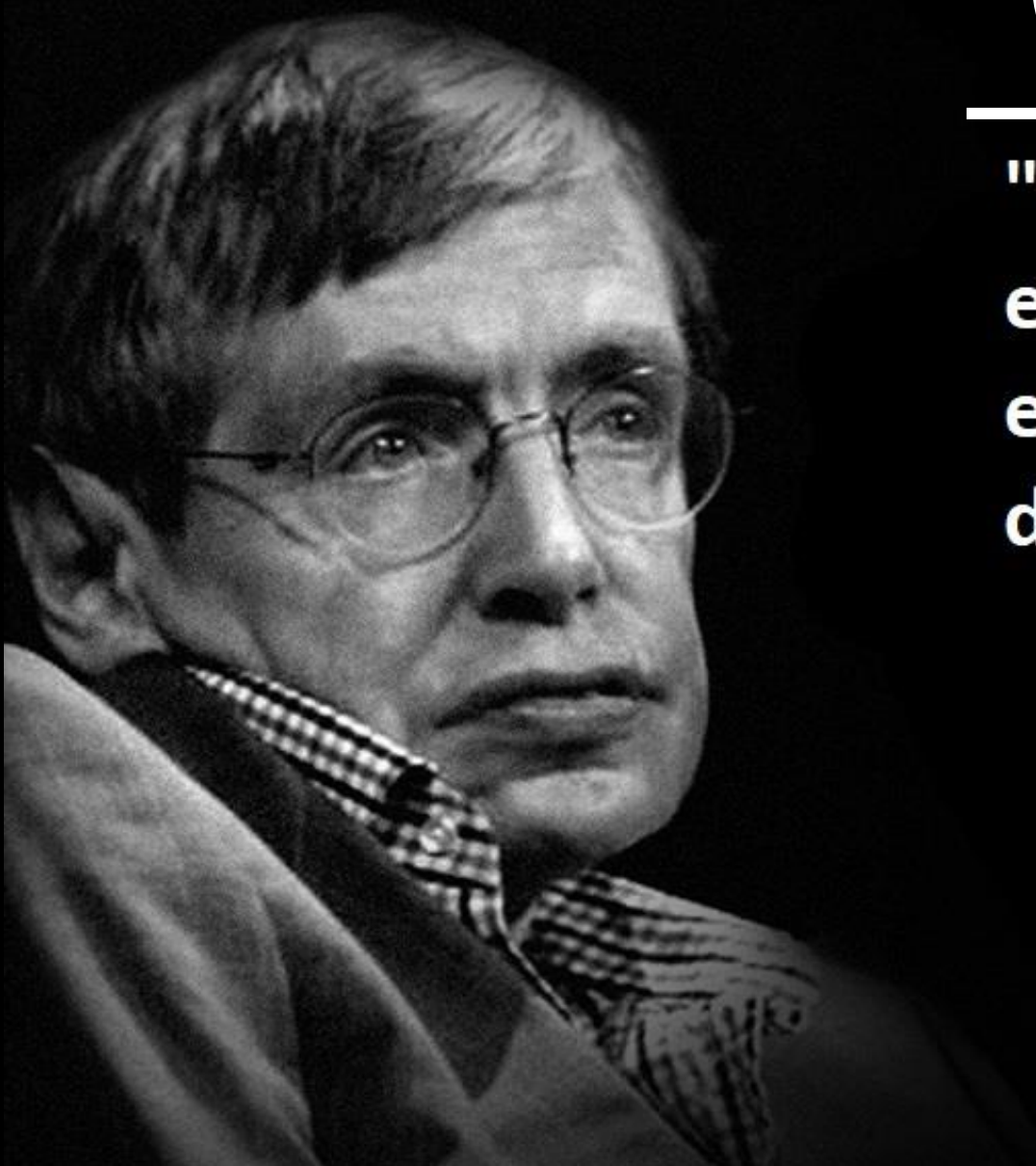
Oliver Selfridge



Nathaniel Rochester



Trenchard More



Conclusion

"The rise of powerful AI will be either the best or the worst thing ever to happen to humanity. We do not know which."

- Stephen Hawking

References

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- Graham P. Collins (2002) Claude E. Shannon: Founder of Information Theory
- Alexander S. Gillis (2019) Turing Test
- History Computer, Logic Theorist – Complete History of the Logic Theorist Program
- Dartmouth.edu (<https://250.dartmouth.edu/highlights/artificial-intelligence-ai-coined-dartmouth>)

**Thank you.
Any Questions?**

