History of AI & GitHub

Goals,

List, and describe key moments in the history of AI

Explain the procedure, and main objective of Turing’s ‘Imitation Game’

Explain what version control is and why it can be useful

Implement version control using ‘GitHub Desktop,’ a Graphical User Interface for GitHub

2.1a

The History of Artificial Intelligence

The first autonomous mobile robot with the ability to perceive and reason about its surroundings, Shakey. From 1966 through 1972, The Artificial Intelligence Center at SRI conducted research on a mobile robot system nicknamed Shakey. Shakey was developed by a team led by Nils. J Nilsson.

Shakey was the first ever robot to integrate perception, planning and action. It used a combination of AI techniques, including computer vision, natural language processing, and automated reasoning. With the help of sensors, it could perceive it environment and actuators to move around.

Shakey’s contributions to AI and robotics

-The STRIPS system developed what allowed Shakey to reason about its goals and generate plans to achieve them, was the groundwork for future developments in AI planning and decision making

-Shakey provided a platform for testing and refining theories in AI and robotics. The insight gained from working with Shakey influenced researched and development in these fields.

-Shakey demonstrated the potential for robots to perform complex tasks and interact intelligently with their environment.

2.2a

1. Turning Machine > The design for a computing device introduced in 1936, conceived the machine to be a mathematical tool that could recognize undecidable propositions.

2. Automatic Computing Engine (ACE) > The first complete specification of an electronic stored-program all-purpose digital computer. However, his colleagues at NPL thought the engineering was too difficult to attempt, so a much smaller machine was built the pilot model ACE in 1950

3.Breaking the Enigma Code > during world war ||, Turning worked at Bletchley Park, where he played a key role in breaking the German Enigma Code. His work on cryptanalysis and the development of the bombe machine significantly contributed to the allied victory

*4. Since he had hay fever, he wore a gasmask on his bike ride to work to prevent pollen from getting to him (also he was gay > Gay mathematician slay)*

2.2b Turing’s imitation game

A test to answer the question: Can machines think? Rather than directly trying to define or measure thinking, turning shifted the focus to behavior and interaction.

The procedure,

-A human interrogator > the person tasked to figure out who the human is and who the machine is.

-A human respondent > One of the two entities communicating with the interrogator.

-A machine > The entity who being tested to see if it can imitate human responses

The interrogator sits in a separate room and communicates with both the human and the machine using a series of written questions. The interrogator is tasked to determine which of the two respondents is the machine and which is the human. The machines’ goal is responded in such a way that convinces the interrogator that it is the human.

If the machine fools the interrogator is passes the test.