

Artificial Intelligence and Its Platforms

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Abstract— Artificial Intelligence is not a new word and not a new technology for researchers. Artificial intelligence (AI) is when a machine mimics the cognitive functions that humans combine with other human brains, such as learning and problem solving, knowledge representation, social intelligence. society and intelligence in general.

AI applications also involve the use of expert systems such as speech recognition and machine vision. AI platform can be called weak AI / Narrow AI usually for a specific task or strong AI also known as general artificial intelligence that can find solutions to unknown tasks. In this paper we are giving brief description of AI its history background and mainly focus on its platforms.

Indexed Terms-- AI, PI, PLATEFORMS, ML DEEP LEARNING,

I. BACKGROUND & LITERATURE

This technology is much older than you can imagine. There are even myths about robots in ancient Greek and Egyptian mythology. Here are some of the key milestones in AI history that define the journey from AI generation to development to date.

In Year 1943: The first work done by Warren McCulloch and Walter pits in 1943. They proposed a model of artificial neurons. Year 1949: Donald Hebb demonstrated an updated rule to change the strength of connections between neurons. His rule is now called learning the Hebbian language. Year 1950 Alan Turing, British mathematician and pioneer in the field of machine learning in 1950. Alan Turing publishes "Computer and Intelligence", in which he gives a test. The test that can test a machine's ability to exhibit intelligent behavior comparable to that of a human is known as the Turing test. Year 1955 An Allen Newell and Herbert A. Simon created the "first artificial intelligence program" which was named as "Logic Theorist". This program had proved 38 of 52

Mathematics theorems, and find new and more elegant proofs for some theorems. Year 1956 The word "Artificial Intelligence" first adopted by American Computer scientist John McCarthy at the Dartmouth Conference. For the first time, AI coined as an academic field. At that time, high-level computer languages such as FORTRAN, LISP or COBOL were invented. And enthusiasm for AI was high at the time. Year 1966 Researchers focus on developing algorithms capable of solving mathematical problems. Joseph Weizenbaum created the first chatbot in 1966, named ELIZA Year 1972 The first intelligent humanoid robot was built in Japan with the name WABOT1. The period from 1974 to 1980 was the first winter of AI. AI winter refers to a time when computer scientists face a severe shortage of government funding for AI research.

During the AI winter, interest in artificial intelligence advertising has dwindled boom of AI (1980-1987) Year 1980 After AI winter duration, AI came back with "Expert System". Expert systems were programmed that emulate the decision-making ability of a human expert. In the Year 1980, the first national conference of the American Association of Artificial Intelligence was held at Stanford University. The duration between the years 1987 to 1993 was the second AI Winter duration. Again Investors and government stopped in funding for AI research as due to high cost but not efficient result. The expert system such as XCON was very cost effective.

Year 1993 to 2011 The emergence of intelligent agents era was there In 1997, IBM Deep Blue defeated the world chess champion, Gary Kasparov, and became the first computer to beat the world chess champion. 2002 First AI enters the house in the form of a Roomba, a vacuum cleaner. 2006 AI entered the business world until 2006. Companies like Facebook, Twitter and Netflix also started using AI.

Deep learning, big data and artificial general intelligence (2011-present) Year 2011 In 2011, IBM's

Watson won a quiz game where he had to solve complex questions as well as quizzes. Watson has proven that he can understand natural language and solve difficult questions quickly. 2012 Google launches the "Google now" Android app feature, which can provide information to users in the form of predictions. In the year 2014, Chatbot "Eugene Goostman" won a competition in the infamous "Turing test." Year 2018: The "Project Debater" from IBM debated on complex topics with two master debaters and also performed extremely well.

Google has demonstrated an AI program "Duplex" which was a virtual assistant and which had taken hairdresser appointment on call, and lady on other side didn't notice that she was talking with the machine.

AI has developed to a remarkable level. The concept of Deep learning, big data, and data science are now trending like a boom. Nowadays companies like Google, Facebook, IBM, and Amazon are working with AI and creating amazing devices. The future of Artificial Intelligence is inspiring and will come with high intelligence.

II. AI TECHNOLOGIES INCLUDE

MACHINE LEARNING: is considered a subset of AI. For it to work, you need reliable data. Everything you need to set up what you want to do, determine what data is available, and let machine learning solve your problems. algorithms and static models to perform a particular task without using explicit instructions, relying on models and inferences.

AUTOMATION: This is a must-have feature in your AI if you have all benefits. Automation is all about creating software that can do things automatically. Without human intervention. Automated manual processes save time and resources as you can engage employees in other activities that require human intervention. The AI platform you choose should be one that is easy to use, requires no additional tools, requires no additional skills, and can easily handle various automation processes.

Natural language: Natural Language Processing and Understanding: These two features are essential to fully optimize your AI solution. This is because you

need to have a system capable of supporting full speech recognition, natural language understanding, and natural language generation.

Cloud infrastructure: These features provide scalability for growth and access to the resources to deploy even the complex AI and machine learning solutions you need to combine AI and the cloud so you can take advantage of them. their full benefits. software as a service (Saas) when launching AI solutions.

III. AI PLATFORM

Tensor Flow, Microsoft Azure, Rainbird, Infosys Nia, Wipro Holmes, Dialogflow, Premonition, Ayasdi, Mindmeld, K AI, Vital A.I and many more.

GOOGLE AI PLATFORM: The artificial intelligence platform enables machine learning developers, data scientists, and data developers to quickly and cost-effectively execute their machine learning projects from idea to production and deployment.

Tensor flow: The main open-source library to help you develop and train ML models. Get started quickly by running Colab Notebooks right in your browser. Solve numerical calculations using data flow diagrams.

The Azure: The cloud platform is over 200 cloud products and services designed to help you bring new solutions to life, meet today's challenges, and create the future. Build, run, and manage applications across multiple clouds, on-premises and off-premises, with the tools and infrastructure of your choice

Rain bird: Rainbird is award winning AI makes the business operation smarter

CONCLUSION

Artificial intelligence (AI) is a large branch of computing that focuses on the ability of machines to generate rational behavior from external inputs. The goal of AI is to create systems capable of performing tasks that would otherwise require human intelligence. AI platforms involve the use of machines to perform

tasks performed by humans. The platform simulates the cognitive functions of problem solving, learning, reasoning, social intelligence, and general intelligence performed by the human mind.

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