# **OVERVIEW OF ARTIFICIAL INTELLIGENCE**

Tirth Jain<sup>1</sup>, Jayant Grover<sup>2</sup>, Namit Gupta<sup>3</sup>

<sup>1</sup>Student, College of Computing Sciences and Information Technology, TeerthankerMahaveer University, Moradabad

<sup>2</sup>Student, College of Computing Sciences and Information Technology, TeerthankerMahaveer University, Moradabad

<sup>3</sup>Associate Professor, College of Computing Sciences and Information Technology, TeerthankerMahaveer University, Moradabad MORADABAD: 244001

<sup>1</sup>tirth886jain@gmail.com

<sup>2</sup>jayantgrover7417@gmail.com

<sup>3</sup>namit.k.gupta@gmail.com

Abstract— Overview of AI (ARTIFICIAL INTELLIGENCE). This is The Short Paper What i discuss? What is Artificial Intelligence? History of Artificial Intelligence (AI) during 20<sup>th</sup>century,Goal of AI (ARTIFICIAL INTELLIGENCE), Contribute of AI (ARTIFICIAL INTELLIGENCE), Programming without AT and Programing with AT, AI (ARTIFICIAL INTELLIGENCE) TECHINIQUE, APPLICATION OF AI (ARTIFICIAL INTELLIGENCE).

*Keywords*— Tutorial point,ai, artificial intelligence, application of artificial intelligence, ai techniques, history of ai..,

I. INTRODUCTION



Since the invention of computer and machine OR more Advance Technology they are Capable to do various task went on growing. Human's developed the power of Computer System which increase the speed and reduce the size. Day by Day human are inventing new technology which more power full from the previous one. The Branch of Computer Science are named as AI (ARTIFICIAL INTELLIGENCE) creating the computer and machine which more intelligent like human Being is

Called named or as AI (ARTIFICIAL **INTELLIGENCE**).According to father of ARTIFICIAL **INTELLIGENCE** (AI) **J**hon *McCarthy "The Science and engineering of making* intelligent machines, especially intelligent computer system". AI (ARTIFICIAL INTELLIGENCE): Artificial Intelligence is simulation of HI (HUMAN INTELLIGENCE) process by Machine for advance Computer system thinks like human being.

> II. HISTORY OF AI (ARTIFICIAL INTELLIGENCE)

→ History of AI During 20<sup>th</sup> Century:

YEAR	MILESTONE // INOVATION		
1923	KarelČapek play named "Rossum's		
	Universal Robots" (RUR) opens in		
	London, first use of the word "robot" in		
	English.		
1943	Foundation of Neural Networks laid.		
1945	Isaac Asimov, a Columbia University		
	alumni, coined the term Robotics.		
1950	Alan Turing introduced Turing Test for		
	evaluation of intelligence and		
	published Computing Machinery and		
	Intelligence. Claude Shannon		
	published Detailed Analysis of Chess		
	Playing as a search.		
1956	John McCarthy coined the		
	term Artificial Intelligence.		
	•		

AC-2018) Moradabad [2018]

<b></b>	
	Demonstration of the first running AI program at Carnegie Mellon University.
1958	John McCarthy invents LISP
1950	programming language for AI.
1964	Danny Bobrow's dissertation at MIT
	showed that computers can understand
	natural language well enough to solve
1965	algebra word problems correctly.
1905	Joseph Weizenbaum at MIT
	built ELIZA, an interactive problem
	that carries on a dialogue in English.
1969	Scientists at Stanford Research Institute
1909	Developed Shakey, a robot, equipped
	with locomotion, perception, and
	problem solving.
1973	The Assembly Robotics group at
	Edinburgh University built Freddy, the
	Famous Scottish Robot, capable of using vision to locate and assemble
	models.
1979	The first computer-controlled
	autonomous vehicle, Stanford Cart, was
1095	built.
1985	
	Harold Cohen created and
	demonstrated the drawing
	program, Aaron.
1000	
1990	Major advances in all areas of AI –
1990	
1990	Major advances in all areas of AI – • Significant demonstrations in
1990	
1990	• Significant demonstrations in
1990	<ul> <li>Significant demonstrations in machine learning</li> </ul>
1990	<ul> <li>Significant demonstrations in machine learning</li> <li>Case-based reasoning</li> </ul>
1990	<ul> <li>Significant demonstrations in machine learning</li> <li>Case-based reasoning</li> <li>Multi-agent planning</li> </ul>
1990	<ul> <li>Significant demonstrations in machine learning</li> <li>Case-based reasoning</li> <li>Multi-agent planning</li> <li>Scheduling</li> </ul>

	<ul><li>and translation</li><li>Vision, Virtual Reality</li><li>Games</li></ul>
1997	The Deep Blue Chess Program beats the then world chess champion, Garry Kasparov.
2000	Interactive robot pets become commercially available. MIT displays Kismet, a robot with a face that expresses emotions. The robot Nomad explores remote regions of Antarctica and locates meteorites.

#### II.AI (ARTIFICIAL INTELLIGENCE)



Artificial Intelligence is simulation of Human Intelligence (HI) it is only accomplished by studying human brain like (Thinking, Decision-Making, Learning, Working, solve problem) and outcome of study of developing intelligent software and system that behave like human do.

Question: Can Machine behave like Human do?

Answer: Yes Machine Behave like Human do.

- I) Goal of AI(Artificial Intelligence)
- ACreate Expert SystemBTo Implement Human Behavior and<br/>Intelligence into Machine and<br/>Advance computer System.
- a) To Create Expert System

[2018]

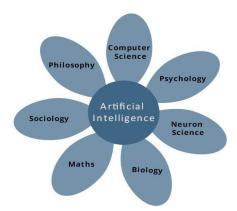
→The System Which Exhibit intelligent behavior, Learn, Demonstrate, explain, and advice its user. E.g., Google, Assistant, Hike Chat Assistant (NATASHA), LINK MARK II (CIA SOFTWARE)...,

a) To Implement Human Behavior And Intelligent in Machine.

→Create System That Understand, Think, Learn, And Behave Like Human. E.g., ROBOTICS..,

III.CONTRIBUTES OF AI (ARTIFICIAL INTELLIGENCE)

One of the following areas, one or multiple areas can contribute to build an intelligent system and machine



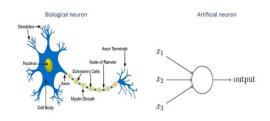
Artificial Intelligence (AI) is science and Technology based on discipline such as computer science, Psychology, Neuron Science, Biology, Math's, Sociology, and Philosophy.

ammin	g without	Programming With
	AND WIT	TH AI.
II)	PROGRA	MMING WITHOUT AI

Programming without	Programming With
AI	AI
Without AI can answer	With AI can answer
specific question. Which	generic question.
meant to be solve.	e.g., Decision
e.g., Math's	Making,
Calculation,	
Modification into the	Modification into the
program leads Changes	Program or
in Structure	information

	independently without affecting its structure.
Modification may not quick and Easy	Quick And Easy Program and information modification

#### IV.AI (ARTIFICIAL INTELLIGENCE) TECHNIQUE



AI Based Techniques. AI provides the potential to enable computer to emulate functions carried out by human.

a) In Real World, The knowledge has become unwelcomed properties.

 $\rightarrow$ It's volume is Huge, Next to unimaginable.

 $\rightarrow$  It's not well formatted and well organized.

 $\rightarrow$ It's being changing constantly.

b) AI Technique is a manner of organize and use of knowledge efficiently in such a way

 $\rightarrow$  It should be perceivable by the people who provide it.

 $\rightarrow$  It should be easily modifiable to correct error.

 $\rightarrow$  It should be useful in many situation though it is incomplete or inaccurate.

III) APPLICATION OF AI:

i)	Gaming
ii)	Natural Language Processing
iii)	Expert System
iv)	Vision System
v)	Speech recognition
vi)	Handwriting Recognition
vii)	Intelligent Robot

## i. Gaming

AI plays crucial role in strategic games such as chess, poker, tic-tac-toe, etc., where machine can think of large number of possible positions based on heuristic knowledge.

## ii. Natural Language Processing

It is possible to interact with the computer that understands natural language spoken by humans.

# iii. Expert Systems

There are some applications which integrate machine, software, and special information to impart reasoning and advising. They provide explanation and advice to the users.

## iv) Vision Systems

These systems understand, interpret, and comprehend visual input on the computer. For example,

 $\rightarrow$  A spying airplane takes photographs, which are used to figure out spatial information or map of the areas.

 $\rightarrow$  Doctors use clinical expert system to diagnose the patient.

 $\rightarrow$  Police use computer software that can recognize the face of criminal with the stored portrait made by forensic artist.

# iv. Speech Recognition

Some intelligent systems are capable of hearing and comprehending the language in terms of sentences and their meanings while a human talks to it. It can handle different accents, slang words, noise in the background, change in human's noise due to cold, etc.

# v. Handwriting Recognition

The handwriting recognition software reads the text written on paper by a pen or on screen by a stylus. It can recognize the Shapes of the letters and convert it into editable text.

## vi. Intelligent Robots

Robots are able to perform the tasks given by a human. They have sensors to detect physical data from the real world such as light, heat, temperature, movement, sound, bump, and pressure. They have efficient processors, multiple sensors and huge memory, to exhibit intelligence. In addition, they are capable of learning from their mistakes and they can adapt to the new environment.

#### CONCLUSION

This Paper Deal with conceptual knowledge of Overview of Artificial Intelligence (AI). By This

[2018]

it's prove that Machine behave like human do Software & Robots are the best example of AI. Software Like LINK MARK II, Google Assistant, Hike Chat Assistant (NATASHA).

#### REFERENCES

[1] What is Artificial Intelligence? [2] History of Artificial Intelligence (AI) during  $20^{th}$  century.

[3] Goal of AI (ARTIFICIAL INTELLIGENCE)

[4] Contribute of AI (ARTIFICIAL INTELLIGENCE)

[5] Programming without AT and Programing with AT

[6]AI (ARTIFICIAL INTELLIGENCE) TECHINIQUE

[7] APPLICATION OF AI (ARTIFICIAL INTELLIGENCE).

[8] Images Taken From Google Im