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Who, When and What?



LEARNING OUTCOMES

At the end of the chapter, students will be able to:

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| ▶ Understand the evolution of AI | ▶ Outline the work of Alan Turing |
| ▶ Outline the work of John McCarthy | ▶ Outline the work of Marvin Minsky |
| ▶ Outline the work of Herbert Simon | ▶ Outline the work of Arthur Samuel |
| ▶ Outline the work of Frank Rosenblatt | ▶ Outline the work of Gerald Sussman |
| ▶ Outline the work of Guy L. Steele Jr | ▶ Outline the work of Geoffrey Hinton |
| ▶ Outline the work of YannLeCun | ▶ Outline the work of Andrew NgR |

CHAPTER NOTES

- ▶ The evolution of AI has been a remarkable journey marked by significant milestones and transformative shifts
- ▶ The integration of AI into various industries, including healthcare, finance, and autonomous vehicles, has further propelled its evolution
- ▶ According to Fortune, big tech will invest over \$50 billion into AI development in 2023 alone.
- ▶ **Alan Turing:** Mathematician who laid the groundwork for AI with the Turing Machine and introduced the Turing Test.
- ▶ **John McCarthy:** Coined "Artificial Intelligence," organized the Dartmouth Workshop, and developed the Lisp programming language.
- ▶ **Marvin Minsky:** Cognitive scientist and co-founder of AI, explored neural networks and robotic intelligence.
- ▶ **Herbert Simon:** Nobel laureate who studied decision-making and co-developed the "Logic Theorist" program.
- ▶ **Arthur Samuel:** Pioneer of machine learning, created the first self-learning AI for checkers.
- ▶ **Frank Rosenblatt:** Introduced the Perceptron and pioneered neural network research.
- ▶ **Gerald Sussman:** Co-founder of MIT AI Lab, contributed to AI languages and software engineering.
- ▶ **Guy L. Steele Jr.:** Collaborator on Scheme programming language, vital in AI research.
- ▶ **Geoffrey Hinton:** Deep learning trailblazer, revolutionized computer vision and neural networks.
- ▶ **YannLeCun:** Leading figure in convolutional neural networks, advanced computer vision.
- ▶ **Andrew Ng:** Co-founder of Google Brain, popularized AI education through online courses.