

Chapter 1: The Dawn of Artificial Intelligence In the early 20th century, the concept of machines that could think like humans was merely science fiction. However, as computing power grew and algorithms advanced, artificial intelligence began to take shape as a serious scientific field. Researchers such as Alan Turing laid the theoretical foundation by asking whether machines could simulate human reasoning. Chapter 2: Neural Networks and Learning Machines By the mid-20th century, the development of neural networks revolutionized the field. These computational models, inspired by the human brain, allowed machines to learn from data. Although early attempts were limited by hardware constraints, the 21st century brought a new wave of success thanks to advances in GPUs and big data. Chapter 3: AI in the Modern World Today, artificial intelligence powers everything from search engines and recommendation systems to self-driving cars and virtual assistants. The rise of deep learning and natural language processing has made it possible for machines to understand, generate, and even create content that once required human intelligence. Chapter 4: Ethical Implications and the Future of AI As AI continues to evolve, ethical questions about privacy, bias, and employment arise. Ensuring that AI systems are transparent, fair, and aligned with human values is one of the greatest challenges of our time.

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