Artificial Intelligence (AI) is a branch of computer science focused on creating systems that can perform tasks that normally require human intelligence. These tasks include understanding natural language, recognizing patterns, solving problems, and making decisions. AI research began in the mid-20th century, with early goals such as creating machines that could reason, learn, and adapt.

There are two main types of AI: narrow AI, which is specialized for a specific task, and general AI, which can perform any intellectual task a human can do. Machine Learning (ML) is a subfield of AI where algorithms improve their performance as they are exposed to more data.

Applications of AI include speech recognition, image classification, autonomous vehicles, and medical diagnosis. Natural Language Processing (NLP) allows machines to understand and respond to human language, enabling chatbots, translation tools, and virtual assistants.

Ethical concerns in AI involve privacy, job displacement, bias in decision-making, and potential misuse in surveillance or weaponry. AI development requires balancing innovation with responsible use to ensure benefits for society.

In conclusion, AI is a transformative technology with vast potential, but it must be developed thoughtfully. The future of AI will depend on collaboration between researchers, policymakers, and the public to guide its growth responsibly.