Artificial Intelligence (AI) Introduction

Artificial Intelligence refers to the simulation of human intelligence in machines that are programmed to think and act like humans. The core idea is to enable computers to perform tasks such as reasoning, learning, perception, and decision-making.

Branches of AI

1. **Machine Learning (ML):** Algorithms that enable systems to learn from data and improve over time.
2. **Natural Language Processing (NLP):** The ability of machines to understand and generate human lan
3. **Computer Vision:** Systems that interpret and process visual information from the world.
4. **Robotics:** Integration of AI to enable physical machines to perform complex actions.

Applications

AI is applied in self-driving cars, recommendation systems, chatbots, fraud detection, and healthcare diagn With advancements in deep learning and large language models, AI is now capable of generating text, cod

Ethical Considerations

AI also raises concerns regarding bias, transparency, and data privacy. Responsible AI development requires fairness, accountability, and explainability in all deployed systems.