Agentic AI: An Introduction

Agentic AI refers to advanced artificial intelligence systems that can plan, act, and adapt autonomously to achieve user-defined goals.

These systems combine reasoning, planning, and learning capabilities to operate with a high degree of self-direction.

Key components of agentic AI include:

- Perception: The ability to extract meaningful information from the environment.

- Reasoning: Drawing inferences and making decisions based on information.

- Planning: Formulating and sequencing actions to achieve objectives.

- Adaptation: Updating knowledge and behavior based on feedback and new data.

Modern agentic AI is often used in autonomous vehicles, robotics, workflow automation, and long-term conversational agents.

Challenges include ensuring safety, explainability, and alignment with human values.

Research in agentic AI intersects with reinforcement learning, symbolic reasoning, multi-agent systems, and human-AI collaboration.