Introduction to Artificial Intelligence in 2025

Key Points

• AI simulates human-like intelligence such as learning and reasoning, with multimodal models common by 2025.

• Generative AI drives innovation but raises ethical and energy concerns; AI may add $15.7T to the global economy by 2030.

• Applications span healthcare, transportation, education, and climate science.

• Key challenges include privacy, bias, deepfakes, and governance.

What is AI?

Artificial Intelligence includes systems that perform intelligent tasks, from basic automation to advanced neural networks. Narrow AI dominates today, while progress toward AGI continues.

History and Milestones

AI began in the 1950s and advanced through deep learning breakthroughs after 2012. Recent multimodal models demonstrate major progress in reasoning and perception.

Core Technologies and Impact

Machine learning, deep learning, NLP, and computer vision form AI's backbone. AI impacts healthcare, finance, transportation, education, and the environment.

Industry	Application	Benefit
Healthcare	Drug discovery	Faster research
Finance	Fraud detection	Reduced losses
Transport	Autonomous driving	Safer roads
Environment	Climate modeling	Better forecasts