What is machine learning?

Machine learning is the subset of artificial intelligence (AI) focused on algorithms that can "learn" the patterns of training data and, subsequently, make accurate *inferences* about new data. This pattern recognition ability enables machine learning models to make decisions or predictions without explicit, hard-coded instructions.

Machine learning has come to dominate the field of AI: it provides the backbone of most modern AI systems, from forecasting models to autonomous vehicles to large language models (LLMs) and other generative AI tools.