

# Introduction to Machine Learning

Machine Learning is a subset of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed.

Key Concepts:

- Supervised Learning: Learning from labeled training data
- Unsupervised Learning: Finding patterns in unlabeled data
- Neural Networks: Computing systems inspired by biological neural networks
- Deep Learning: A subset of machine learning using deep neural networks

Applications:

- Image recognition and computer vision
- Natural language processing
- Recommendation systems
- Predictive analytics