# Machine Learning Overview

### After this video you will be able to...

- Explain what machine learning is
- List three applications of machine learning encountered in everyday life

### What is Machine Learning?

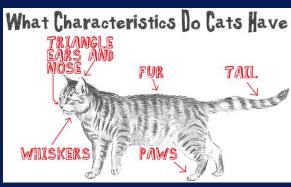


...learning from data



- ... learning from data
- ... no explicit programming





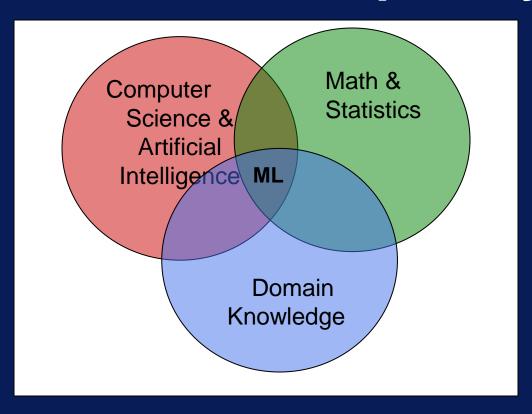
- ... learning from data
- ... no explicit programming
- ... discovering hidden patterns





- ... learning from data
- ... no explicit programming
- ... discovering hidden patterns
- ... data-driven decisions

### Machine Learning (ML) is an Interdisciplinary Field



# Example Application of Machine Learning

Credit card fraud detection



## Example Application of Machine Learning

Handwritten digit recognition

# Example Application of Machine Learning

Recommendations on websites



# More Applications of Machine Learning

- Targeted ads on mobile apps
- Sentiment analysis
- Climate monitoring
- Crime pattern detection
- Drug effectiveness analysis

#### What's in a Name?

Machine learning

Data mining

Predictive analytics

Data science

### **Machine Learning Models**

- Learn from data
- Discover patterns and trends
- Allow for data-driven decisions
- Used in many different applications

