

stanford-machine-learning-course

Week 01

- Introduction
 - Wtf?
 - Supervised/ Unsupervised
- Linear regression with one variable
 - Model and Cost Function
 - Model representation
 - Cost function
 - Parameter Learning
 - Gradient descent
 - Gradient descent for linear regression
- Linear algebra review

Week 02

- Linear regression with multiple variables
 - Multivariate Linear Regression
 - Computing Parameters Analytically
- Octave/ Matlab usage

Week 03

- Logistic Regression
 - Classification and Representation
 - Logistic Regression Model
 - Multiclass Classification
- Regularization
 - Solving the Problem of Overfitting

Week 04

- Motivations
- Neural Networks
- Applications

Week 05

- Neural Networks: Learning
 - Cost Function and Backpropagation
 - Backpropagation in Practice

- Application of Neural Networks

Week 06

- Advice for Applying Machine Learning
 - Evaluating a Learning Algorithm
 - Bias vs. Variance
- Machine Learning System Design
 - Building a Spam Classifier
 - Handling Skewed Data
 - Using Large Data Sets

Week 07

- Support Vector Machines
 - Large Margin Classification
 - Kernels
 - SVMs in Practice

Week 08

- Unsupervised Learning
 - Clustering
 - Dimensionality Reduction

Week 09

- Anomaly Detection
 - Density Estimation
 - Building an Anomaly Detection System
 - Multivariate Gaussian Distribution (Optional)
- Recommender Systems
 - Predicting Movie Ratings
 - Collaborative Filtering
 - Low Rank Matrix Factorization

Week 10

- Gradient descent with large dataset
 - Learning with large dataset
 - Stochastic gradient descent
 - Mini-batch gradient descent
 - Stochastic gradient descent convergence
- Advanced topics
 - Online learning
 - MR

Week 11

- Photo OCR
 - Problem description
 - Sliding windows
 - Data and artificial data
 - Ceiling Analysis

You passed this course! Your grade is 93.30%.