CSC 412 Machine Learning and Knowledge Discovery

Syllabus

Meeting Information

- **Days, Times, & Room:** Tu Th 10:10 AM – 12:05 PM @ 1N 111
- **Homepage:** http://www.cs.csi.cuny.edu/~chen/412
- **Instructor:** Cong Chen (cong.chen@csi.cuny.edu)
- **Office Hours:** Th 2:00 PM – 5:00 PM @ 4N 206

Textbook

- Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow

Grading Policy

- **Attendance & Participation:** 1 points each
- **6 Assignments:** 10 points each
- **3 Exams:** 20 points each

- **Grades:**
  - A: more than 89 points;
  - B: 80 to 89 points;
  - C: 70 to 79 points;
  - D: 60 to 69 points;
  - F: fewer than 60 points

Topics

- Chapter 1 The Machine Learning Landscape
- Introduction to Python
- Chapter 2 End-to-End Machine Learning Project
- Chapter 3 Classification

—— Exam I ———

- Chapter 4 Training Models: Linear Regression, Gradient Descent, Logistic Regression

- Chapter 5 Support Vector Machines

- Chapter 6 Decision Trees

—— Exam II ———

- Chapter 7 Ensemble Learning and Random Forest

- Chapter 8 Dimensionality Reduction

- Chapter 9 Unsupervised Learning Techniques

- (Optional) Chapter 10 Neural Networks and Deep Learning

—— Exam III ———