Syllabus

CSCI 381/780, Fall 2017
Special Topics: Machine Learning in Image Analysis

Instructor

Chao Chen (SB A118, chao.chen@qc.cuny.edu)

Time and location

Mon/Wed 5:00pm – 6:15pm, SB B141

Office hours

Mon/Wed 8:00pm – 9:00pm, or by appointment

Prerequisites

CSCI 313 (Data Structures), MATH 231 (Linear Algebra I)

Recommended books:

Pattern Recognition and Machine Learning (Springer), By Christopher M. Bishop
The Elements of Statistical Learning (Springer), By Trevor Hastie, Robert Tibshirani, Jerome Friedman

Topics

Machine learning: clustering, regression, classification, evaluation, etc.
Computer vision: feature extraction, segmentation, recognition, etc.
Special topics: structured learning, deep learning, etc.

Grading

- ML Projects (three): implementation + experiment + report (4%+18%x2)
- Data Science Visualization Project (15%)
- Two Quiz: (10% x 2)
- Final Exam: (25%)
- Master students need to submit a separate essay by the end of the semester (propose an idea to me, write the report): takes 10% (everything else is multiplied by 0.9).
- Graduate students can use their research projects for course evaluation instead, only if approved by the instructor and the research advisors.
- Late submission of reports or missed presentations will be penalized.

Policy

Absentees are solely responsible for catching-up. Academic dishonesty, such as plagiarism or cheating - taking other people's work with or without their permission in order to get credit for yourself, will be dealt with seriously, including an "F" grade for the course and/or disciplinary action according to the University's policy on academic integrity.