Logistics (Theory) Attendance: None Q&A: moodle discussion forum Announcements: moodle communication: email with CS335/837 in rub office hours; 1th half: Tue (5-6pm)
2nd half: wed (11-12pm) Evaluation Participation: Scribe 2 lecs in Latex (5%) Quizzen: Best 2 (15%) Midsem exam: 25 % Final exam: 40%

Course project: 15%

3-4 members (any problem works, wing techniques learned in the course)

Logistics

Aug 7: Probability/matrix-vector calculations, simple ML pipeline and Kaggle

Aug 14: Linear regression (closed form), gradient descent

Aug 21: Regularization, lasso/ridge regression

Aug 28: Logistic regression (using gradient descent), naive Bayes classifier

Sep 4: Decision Trees

Sep 11: Perceptron + SVM classifiers

Sep 18: QUIZ

Sep 25: Feedforward NNs + backprop

Oct 2: HOLIDAY

Oct 9: Regularizing NNs, optimizers, CNN-based classifier

Oct 16: Simple NLP, text-based classification using embeddings

Oct 23: PCA, dimensionality reduction

Oct 30: Clustering, k-means

Nov 6: Ensemble classifiers, boosting/bagging, random forests

Evaluation

In-lab: 35%

Qui2 - 1: 15 %

Final exam: 50%

Program templates will all be in python

mandatory attendance