

Preparation for Midterm

Topics that will be covered:

- Intro to ML (Lecture1):
 - Supervised vs Unsupervised Learning
 - ML project steps
- Linear Regression (Lecture2):
 - Hypothesis, gradient descent, cost function
- Logistic Regression (Lecture3):
 - Hypothesis, gradient descent, cost function
- Naive Bayes (Lecture4):
 - Conditional Probability, Bayes Theorem, sklearn
- SVM (Lecture5):
 - Support Vectors, kernels, margins
- kNN (Lecture5):
 - Neighbours, majority voting, pros and cons
- Decision Trees (Lecture6):
 - Intuition, Entropy, Information Gain
- Data Preprocessing, Evaluation, etc. (Lecture6)

Mid1 will contain types of questions:

- Theory ~ 30%
 - Theoretical questions, definitions
- Problem Solving ~40%
 - Solving problems using theoretical knowledge
- Implementation ~30%
 - Fill the code, find mistakes, write your own parts of code, pseudocode