Competition link:

https://www.kaggle.com/c/epamdscourseclassification3

Methods

LDA and QDA

- Linear and Quadratic Discriminant Analysis (sklearn):
  - base
- Linear discriminant analysis:
  - further reading
- The Elements of Statistical Learning, **p. 106-119**:
  - advanced - “The Elements of Statistical Learning”, Hastie T., Tibshirani R., Friedman J., Section 4.3, p.106-119

Gradient boosting

- A Gentle Introduction to Gradient Boosting, Cheng Li
  - base
- Boosting article by ODS:
  - https://mlcourse.ai/articles/topic10-boosting/
- Gradient Boosting (Wikipedia)
  - further reading
- Gradient Boosting explained [demonstration]
  - visualization
- The Elements of Statistical Learning, **p. 337**:
  - advanced - “The Elements of Statistical Learning”, Hastie T., Tibshirani R., Friedman J., Section 10, p.337

Random Forest

- An Implementation and Explanation of the Random Forest in Python
  - base
- The Elements of Statistical Learning, Section 15, **p.587**
  - advanced

Ensembling methods

- Comprehensive Guide to Ensemble Learning
  - Overview

Class imbalance

- About metrics
    - 1
    - 2
- Common strategies to resolve the problem
    - strategies

Classification problems

- Multiclass and multilabel
    - Overview
- Metrics
    - read part2 only