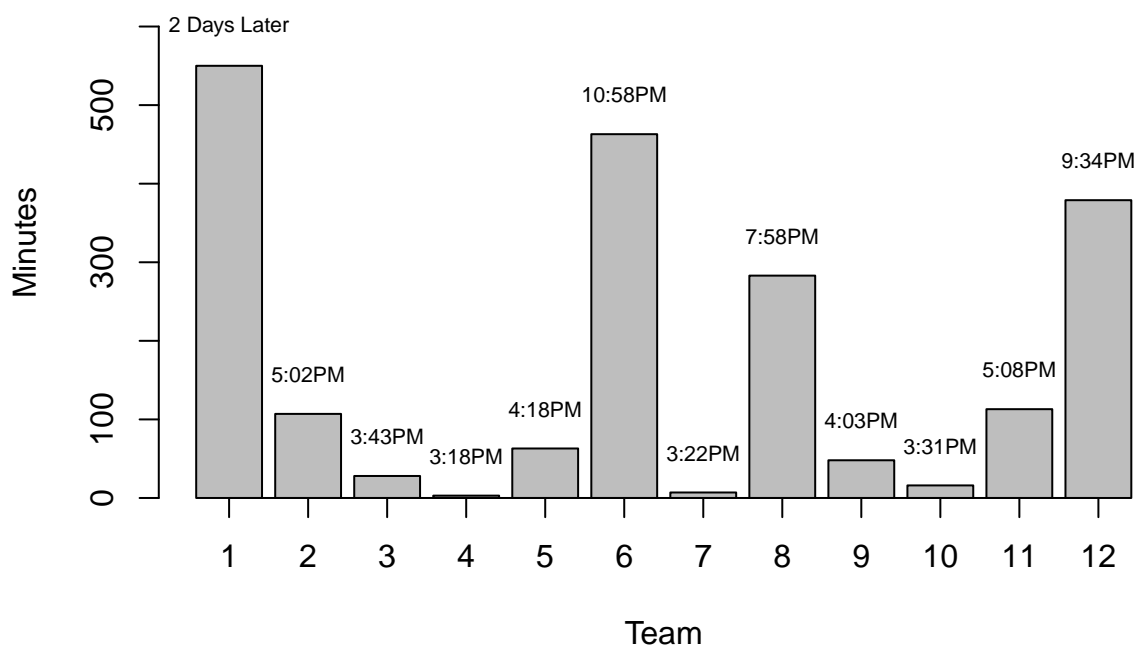# Summary of Project 3

Chengliang Tang

Nov 29, 2016

Feature extraction, storage, running time (cost)

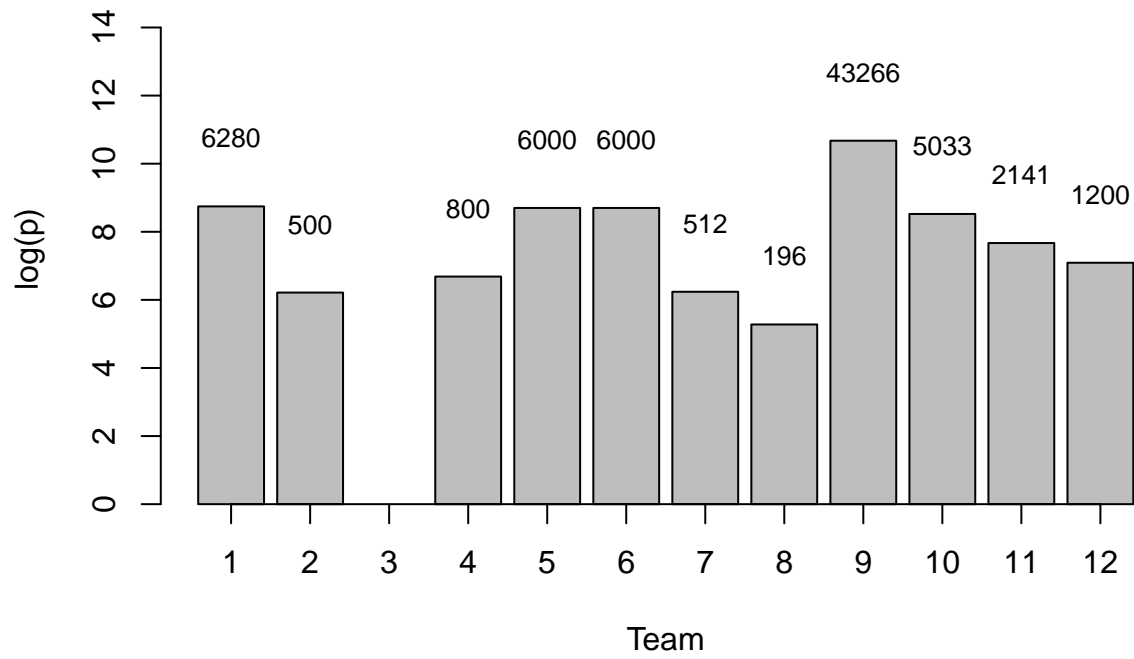**Submission Time**

Submission Time: Minutues from 3:15PM

Dimensions of Extracted Features
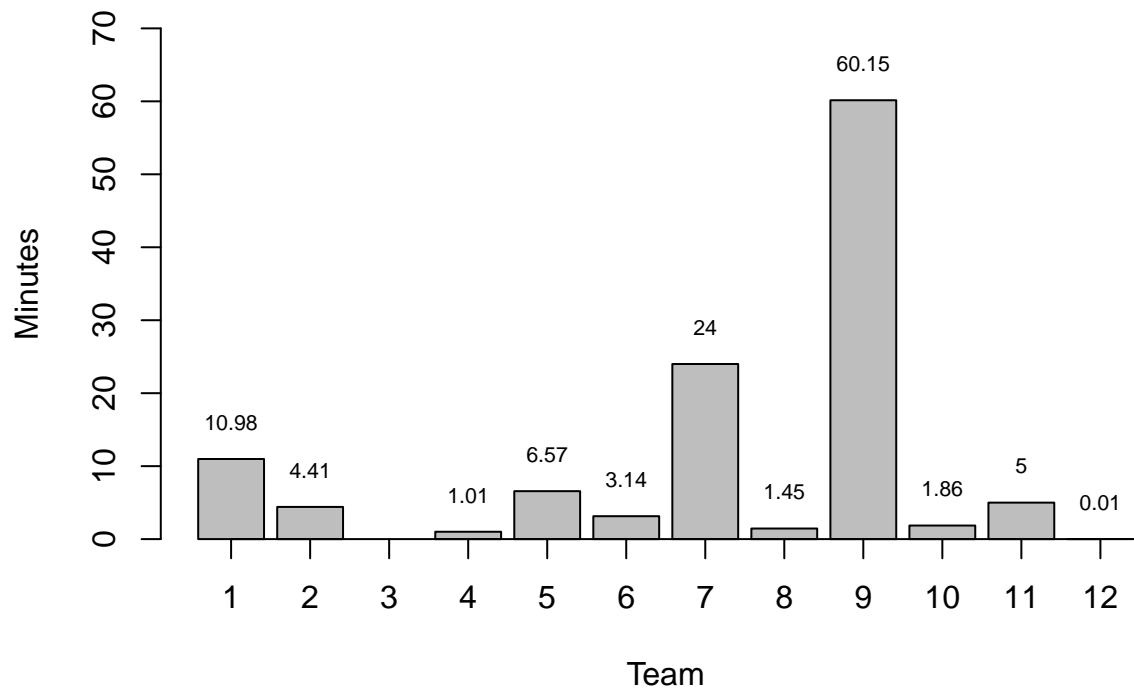
Advanced Model

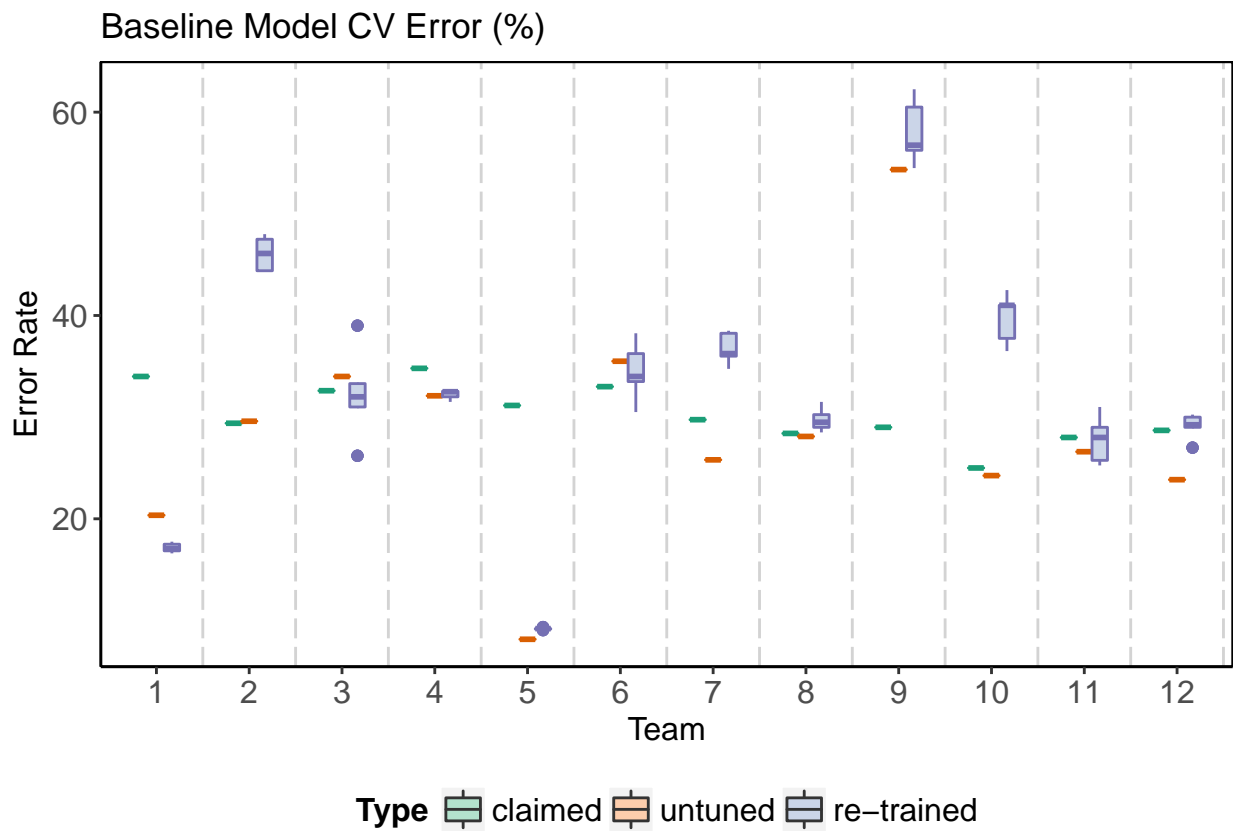## Extracted Advanced Feature Dimensions

Bar chart with x-axis "Team" (1-12) and y-axis "log(p)" (0 to 14). Values labeled: Team 1: 6280, Team 2: 500, Team 4: 800, Team 5: 6000, Team 6: 6000, Team 7: 512, Team 8: 196, Team 9: 43266, Team 10: 5033, Team 11: 2141, Team 12: 1200.

Running Time

Running Time

Bar chart with x-axis "Team" (1-12) and y-axis "Minutes" (0 to 70). Values labeled: Team 1: 10.98, Team 2: 4.41, Team 4: 1.01, Team 5: 6.57, Team 6: 3.14, Team 7: 24, Team 8: 1.45, Team 9: 60.15, Team 10: 1.86, Team 11: 5, Team 12: 0.01.
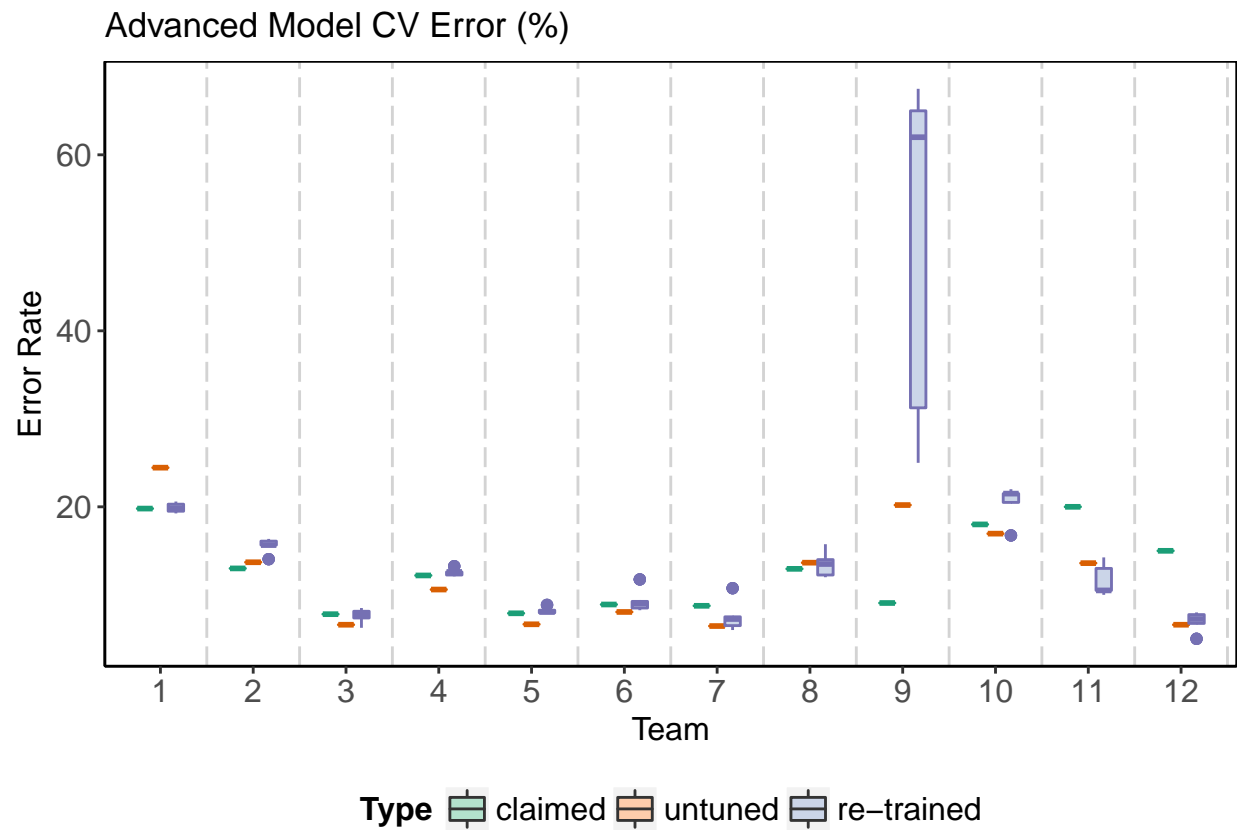
Performance

Baseline Prediction Accuracy

Advanced Prediction Accuracy

Advanced models: SVM(1, 2, 4, 9), CNN(3), xgboost(5), gbm(6, 11), majority vote(7, 10), random forest(8), logistic(12)

Advanced Model CV Error (%)

Type claimed untuned re−trained

Summary of Common Problems

- Ease of Reproducibility(train.R & test.R): Input and Output
- Abosolute path: setwd("F:/UNI/ADS_2016/project3/output") Relative path: setwd("~/output")