

ECE 225 Final Project

Bolun Yan A92413094

Fan Wang A53277514

## PUBG Prediction Project

### Project Description

Players Unknown Battleground (PUBG) is a world-famous shooting game. Only one player/one team out of 100 players may survive and win the game. To maximize the chance of winning, we want to understand which skill(s) have the greatest impact. In other words, our group will dive into the statistics collected from the real PUBG games. After visualization, reorganization the original data. We would train several machine learning models and compare their performances. Our goal is to predict the placement of the player base on his/her game stats.

### Dataset

The dataset was collected from “kaggle” which contains more than 1 million game stats over 29 features. The data fields include:

- DBNOs: Number of enemy players knocked.
- assists - Number of enemy players this player damaged that were killed by teammates.
- boosts - Number of boost items used.
- damageDealt - Total damage dealt. Note: Self-inflicted damage is subtracted.

.....

<https://www.kaggle.com/c/pubg-finish-placement-prediction/data#>

### Schedule

1. Download the dataset
2. Visualize each feature and filter out unnecessary and unrelated features, since the original data is too large
3. Resample and divide the original dataset into the training set and testing set
4. Train the dataset with random forest, logistic regression to get the top correlated features
5. Train the dataset with more machine learning models (neural network etc.)
6. Find the best model that has the highest prediction accuracy