memo

An overview of dataset

What does it include? My dataset include match detail for e-sport game 'league of legends'

refrence URL: https://developer.riotgames.com/apis#match-v5/GET_getMatch most data under ParticipantDto block will be my dataset. https://na.whatismymmr.com/ This gives me a numeric value how well each player is

Where and how will you be obtaining it? Include the link and source.

I write a python script to directly collect my data from riot developer portal but it only allow 100 request for every 2 minutes, therefore my data collection is not done yet when I write this memo, it should be done in the following week.

refrence URL: https://developer.riotgames.com/apis#match-v5/GET_getMatch https://na.whatismymmr.com/

riot_api.py is the script I wrote to collect my data it is in this repo.

About how many observations? How many predictors? There are 6 tiers will be in my dataset, they are 'Iron, Bronze, Silver, Gold, Platinum, Diamond' Each tiers has about 4000 observation and each observation has about 50 perdictors.

What types of variables will you be working with? Most of my variables will be numeric. There are few categorical variables.

Is there any missing data? About how much? Do you have an idea for how to handle it? Since I am the person collecting my data, and it is directly from riot there is no missing data.

An overview of research question(s)

What variable(s) are you interested in predicting? What question(s) are you interested in answering?

I am interested in how to make a prediction on player's mmr (Match Making Rating) based on a game play from some random player. MMR is determined by the rank you are in. I think the match up data is different in each skill level and I am trying to make a prediction on it. Few question that I have now: Will more kill/death rate brings you a higher rank? How much vision score effect your MMR? Is there a huge difference on champExperience between low tier players and high tier players.

Name your response/outcome variable(s) and briefly describe it/them.

MMR (Match Making Rating) will be my outcome. MMR is a number used by League of Legends to represent a player's skill level.

Will these questions be best answered with a classification or regression approach? Most of my question will be best answerd in regression approach.

Which predictors do you think will be especially useful? The following predictors I believe will be most useful: deaths, deaths, assists, champExperience, champLevel, damageDealtToBuildings, longestTime-SpentLiving, wardsPlaced, wardsKilled,visionScore

Is the goal of your model descriptive, predictive, inferential, or a combination? Explain. predictive, I am going to predict a numeric value based on my predictors.

Your proposed project timeline week 3-4: Load and tidy data week 5: Run and write up descriptive analyses week 6-7: Run and adjust models

week 8: write results week 9: Work on draft of paper week 10: edit paper