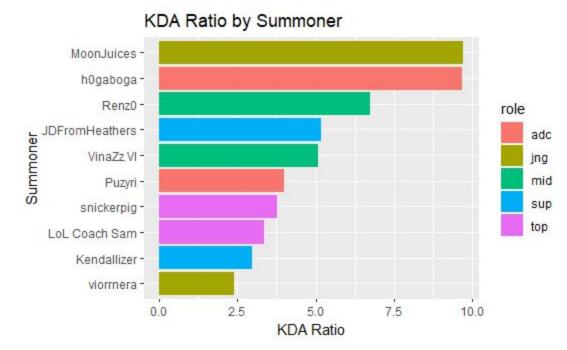
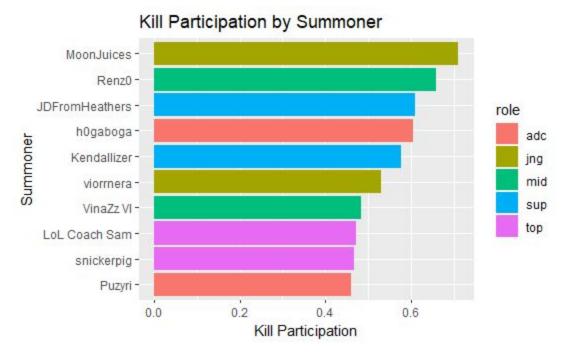
Lucas Kehoe Professor Kubrom Teka DSCI-30100-11 12 December 2019

Data Science Final Project - LUGA League of Legends

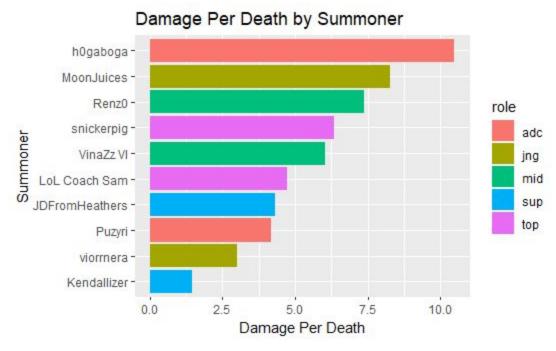
For my data analysis project I have decided to summarize and analyze the data collected from the Lindenwood University League of Legends team. I collected the data myself, put the data into a spreadsheet, and created a Shiny App to give summaries of individual matches. I also produced some graphs in an R Markdown file to discuss some areas that perhaps we can improve.



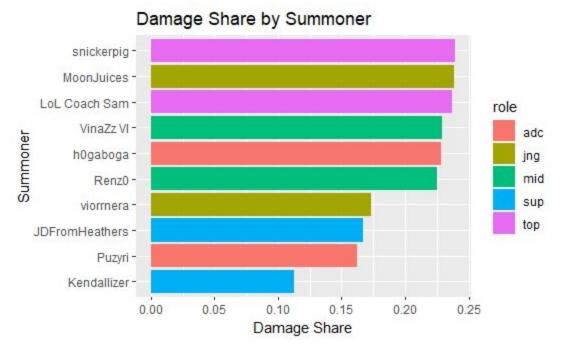
KDA is calculated by **KDA = (Kills + Assists) / Deaths**, unless deaths = 0, then **KDA = Kills + Assists**.



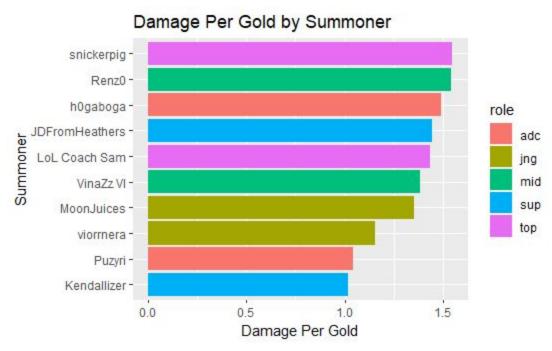
Kill Participation is calculated by the percentage of kills you participated in a game.



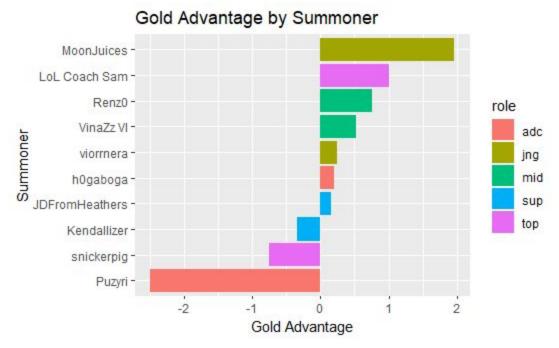
Damage Per Death is how much damage you dealt to enemy champions per death.



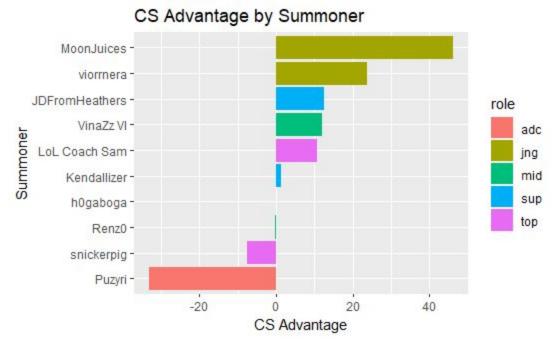
Damage Share is the percentage of damage dealt to champions you did in comparison to your teammates.



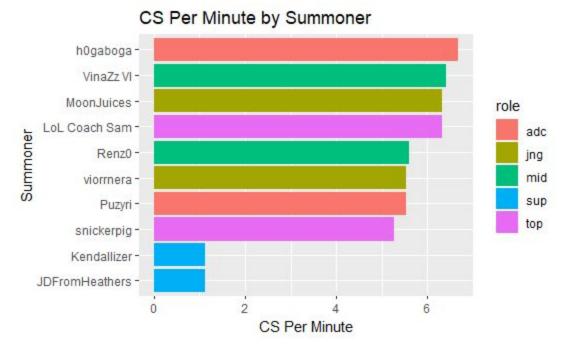
Damage Per Gold is how much damage a player did per Gold earned.



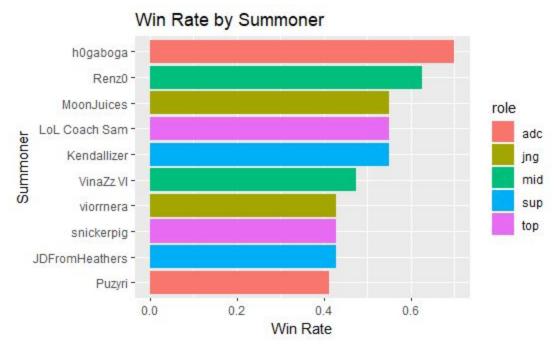
Gold Advantage is how much Gold a player is up by at the end of the game in comparison to their counterpart (by role) on the enemy team.



CS (Creep Score) Advantage is the number of minion kills a player is up by at the end of the game in comparison to their counterpart (by role) on the enemy team.



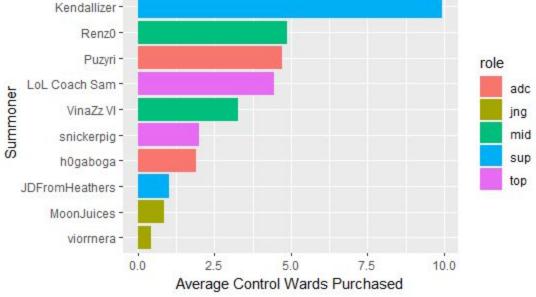
CS Per Minute is the number of minions killed per minute in game.

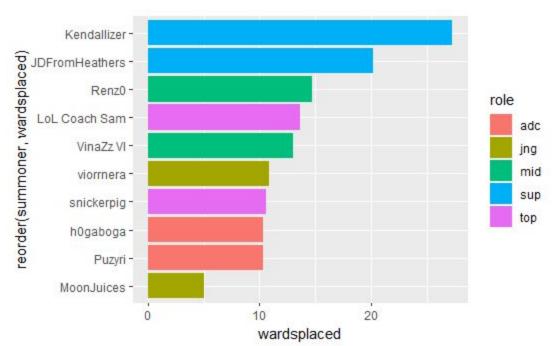


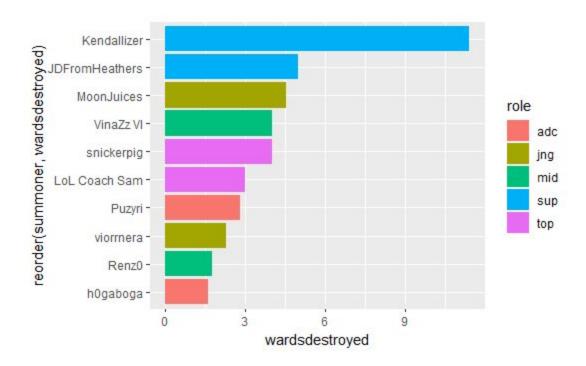
Win Rate is determined by the percentage of games a player has won.

In League of Legends, Wards grant your team vision. Here is some data about wards.

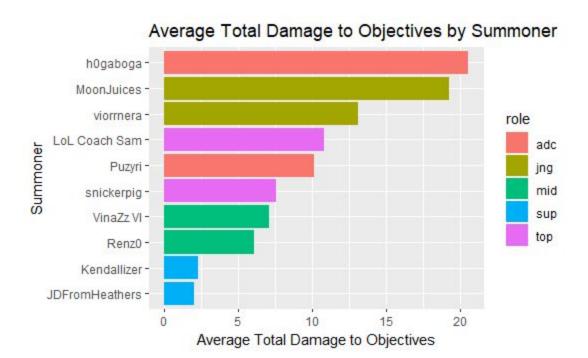


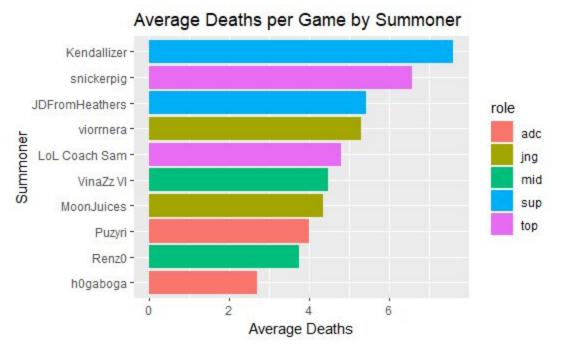






In League of Legends, Objectives are considered either Dragons, Baron Nashors, Rift Heralds, or Turrets.





After looking over these graphs, I have a few insights to make:

- MoonJuices, Renz0, and h0gaboga are performing exceptionally well in KDA Ratio, Kill Participation, and Kills Per Death.
- 2. Kendallizer has incredible vision control, in placing, destroying, and purchasing control wards, much higher than any other player on the team.
- Puzyri and snickerpig could work on farming (the act of "collecting" minion score, or CS)
 in the early game, perhaps helping their lane phase and overall damage and impact on
 the game.
- 4. Our jng (Jungle) players, MoonJuices and viorrnera, could work on purchasing more control wards. Control wards help deny enemy vision by blinding nearby enemy wards, which would help them potentially have more successful attacks on the enemy.
- Our sup (Support) players have very low CS per minute, at near 1 per minute. This is expected as it is not their purpose in the game to collect minions.
- Kendallizer has a very high number of average deaths per game, perhaps he could
 practice a little more caution when exploring unsafe territory in getting such high vision
 control.