



Analysis of Gameplay Factors of the Winning Team

By: Kyle Gross, Lucas Chen, & Mikayla Kurland

GLHF!

E-Sports is a growing field - competitive League of Legends has \$2.5 millions of prize pools a year. The player base is only expanding with 115 million regular players worldwide. Everyone is looking to give their team and edge...

115,000,000

Active players world-wide

\$6,500,000

2020 tournament prize pool

95,680,000,000

Total hours played per year



RULES OF THE GAME

01 THE OBJECTIVE

Move across the map to destroy the enemy's Nexus!

02 THE PLAYERS

2 teams - 10 players - choose your Champion!

03 THE MAP

3 lanes, 11 towers, 3 inhibitors, and many mysterious creatures...

04 THE ABILITIES

Here you could describe the topic of the section

“The key to immortality? Not dying!”

— **Master Yi, the Wuju Bladesman in League of Legends**

GOALS FOR OUR ANALYSIS

1. Identify which factors contribute most to a team's victory in a match.
2. Discover at what point in a match can a winner be determined.
3. Look for trends in gameplay data that might give a team an edge.

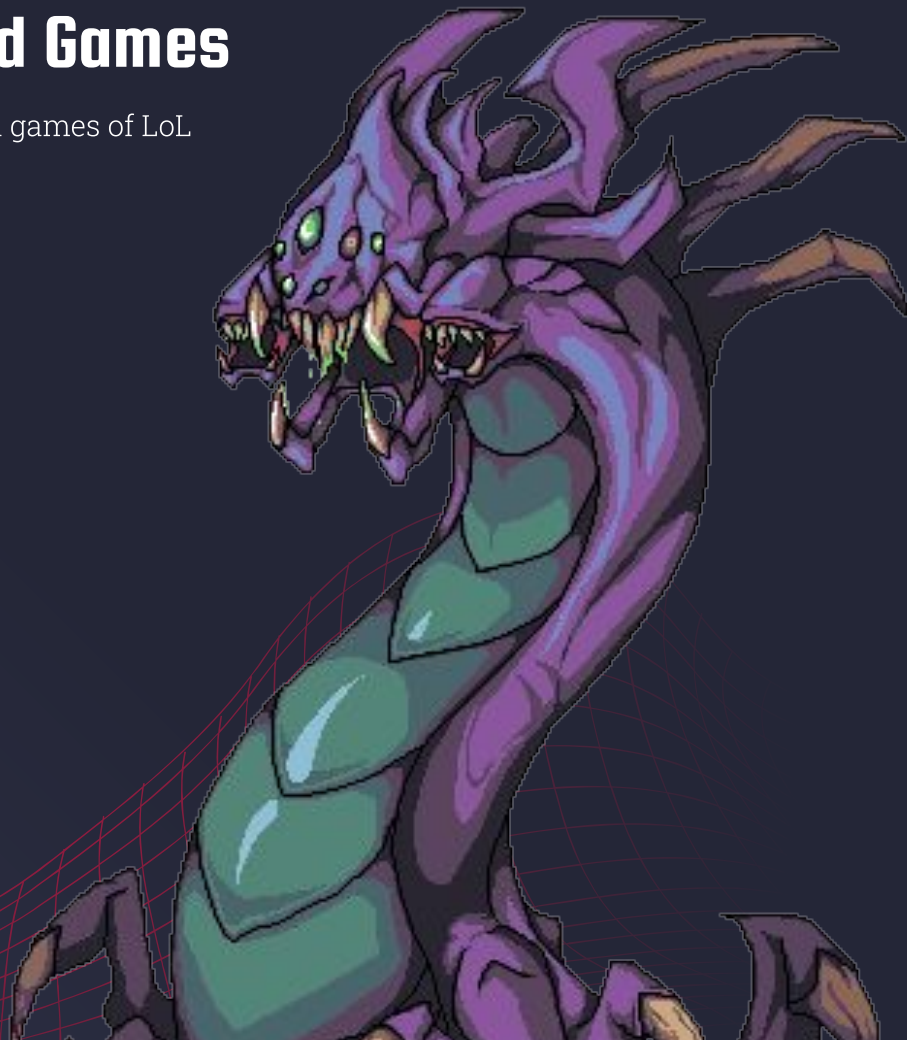
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(LoL) League of Legends Ranked Games

Details from over 50,000 ranked games of LoL

DESCRIPTION OF THE DATA

gameDuration
winner
FirstBlood
firstTower
firstInhibitor
firstBaron
firstRiftHerald
tN_champNid
tN_champN_sum1
tN_champN_sum2
tN_towerKills
tN_inhibitorKills
tN_baronKills
tN_dragonKills
tN_riftHeraldKills
tN_ban1N



MODELING OUR DATA SET

BIAS

Bias in a data set means that one or more factors are heavily weighted and/or represented than others.

OVER-FITTING

The model is too skewed towards the training set, but cannot predict outside data sets.

DIVIDE AND CONQUER



PRE-GAME

All factors which are decided before gameplay begins. This includes: champion picks, summoner spell picks, and champion bans.

EARLY GAME

All factors which contribute to early game play. This includes: which team got first blood, first tower, first inhibitor, first baron, and first dragon.

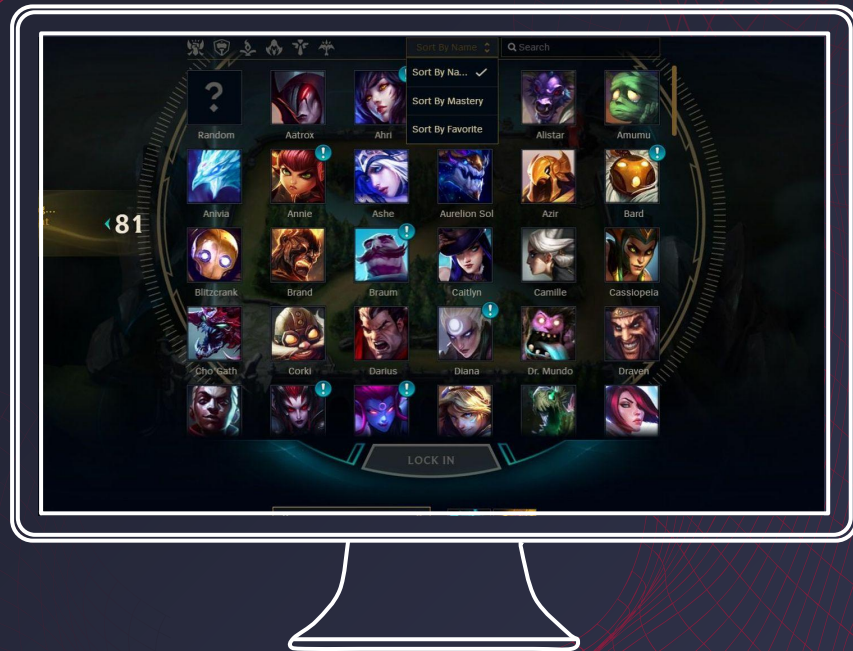
END GAME

All factors not determined until the game ends. This includes: total tower kills, inhibitor kills, baron kills, dragon kills, and rift herald kills for each team.

PRE-GAME FACTORS

50% MODEL ACCURACY SCORE

ADD SIDE-BY-SIDE RED/BUE
HERO GRAPHIC HERE



EARLY GAME DATA

88% ACCURACY SCORE

Fast Games

```
[({0.38705856737786615, 'firstinhibitor'},  
  {0.3540369785737195, 'firstbaron'},  
  {0.04188173393720223, 'firsttower'},  
  {0.02753634878708042, 'firsttriftherald'},  
  {0.0220382729240922, 'firstdragon'},  
  {0.01417966183149764, 'firstblood'},  
  {0.008101376531287511, 'gameduration'},  
  {0.006066506658802486, 't1_champ3id'},  
  {0.006058455940351669, 't2_champ5id'},  
  {0.0060554144932300465, 't1_ban5'}),
```

Slow Games

```
[({0.1905588122668887, 'firstinhibitor'},  
  {0.09019510188566356, 'firstbaron'},  
  {0.04890630120590596, 'gameduration'},  
  {0.025585001490757396, 't1_champ5id'},  
  {0.024579797015844236, 't2_champ2id'},  
  {0.02441880809955123, 't1_champ1id'},  
  {0.0243427970126956, 't2_champ1id'},  
  {0.024135054215380678, 't2_champ3id'},  
  {0.02261110417360015, 't1_champ4id'},  
  {0.02257965059648864, 't1_ban3'}),
```



END GAME

This is the subtitle that makes it
comprehensible

THANKS!



Does anyone have any questions?

CREDITS

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