



# Analysis of Gameplay Factors of the Winning Team

By: Kyle Gross, Lucas Chen, & Mikayla Kurland

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# 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

# 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

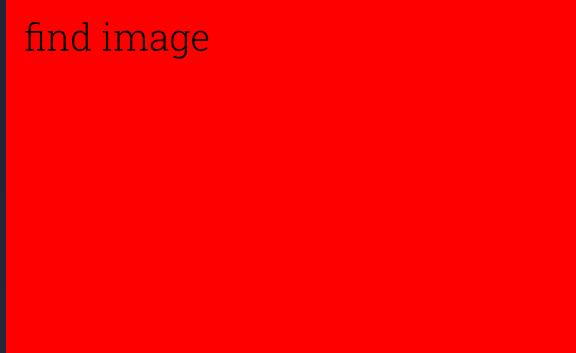
## GOALS FOR OUR ANALYSIS

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.

“The key to immortality? Not dying!”

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

find image

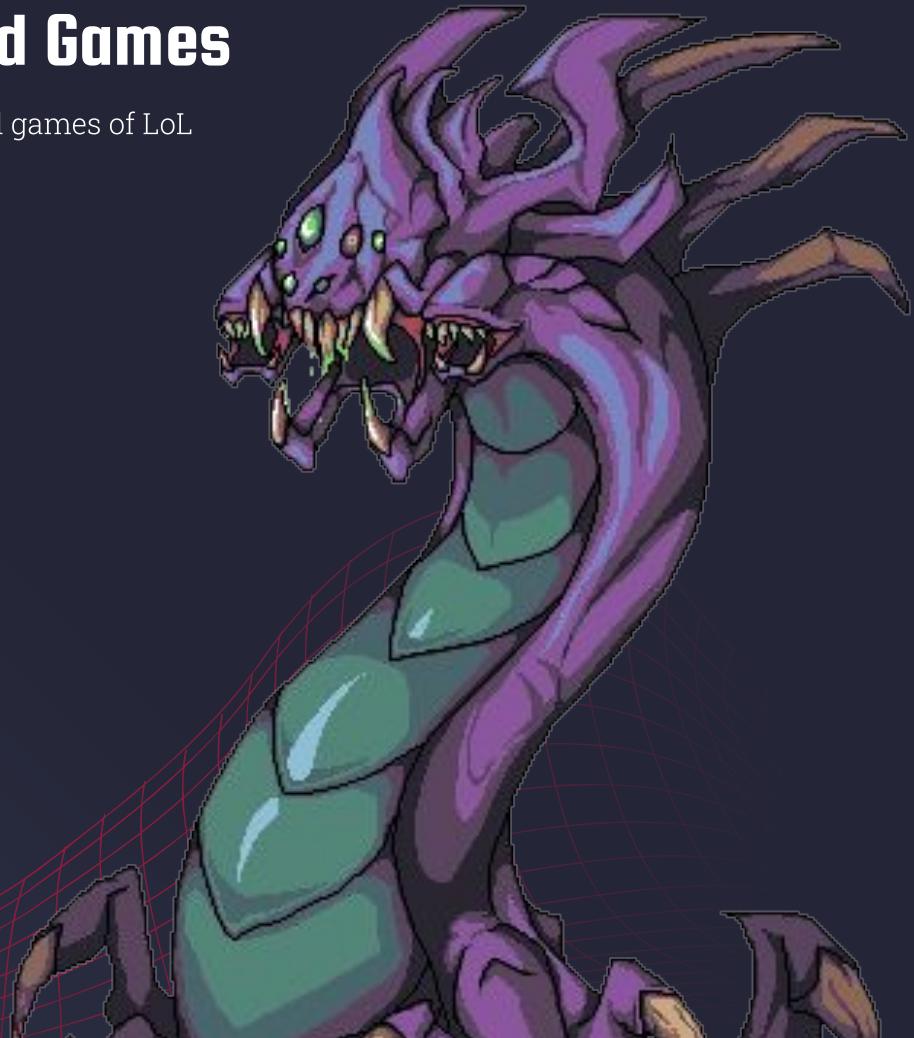


# (LoL) League of Legends Ranked Games

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

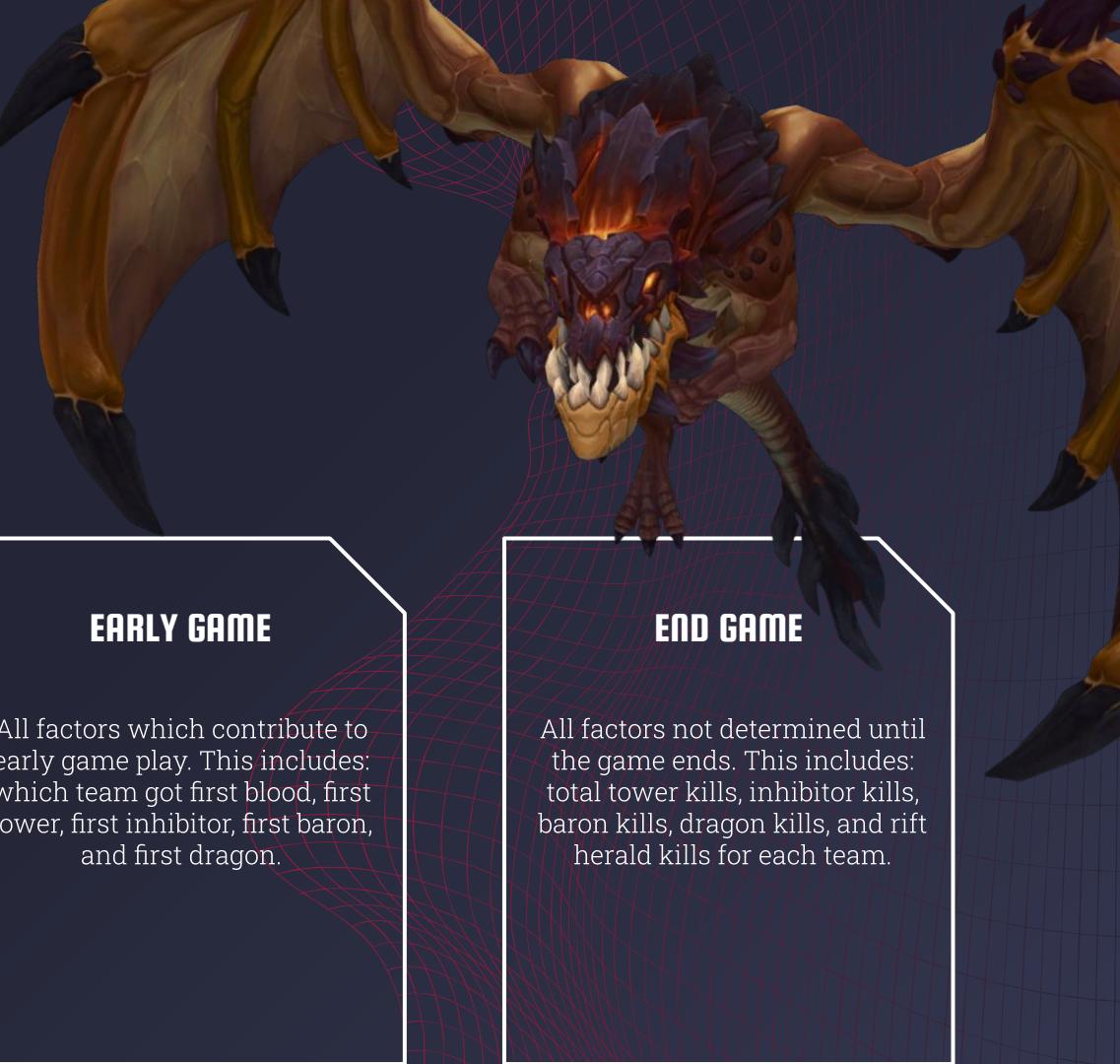
All factors which are decided before gameplay begins. This includes: champion picks, summoner spell picks, and champion bans.

## 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

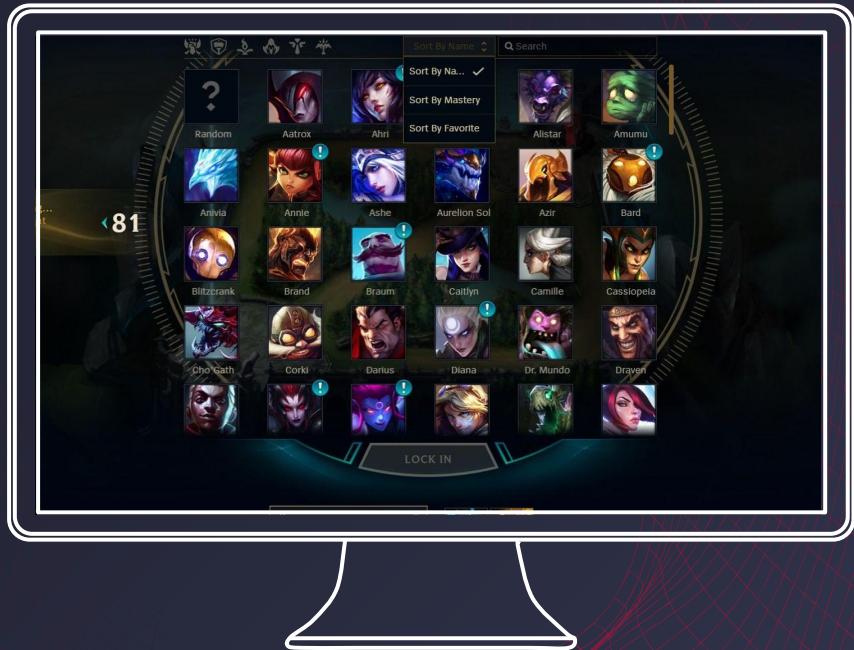
All factors not determined until the game ends. This includes: total tower kills, inhibitor kills, baron kills, dragon kills, and rift herald kills for each team.

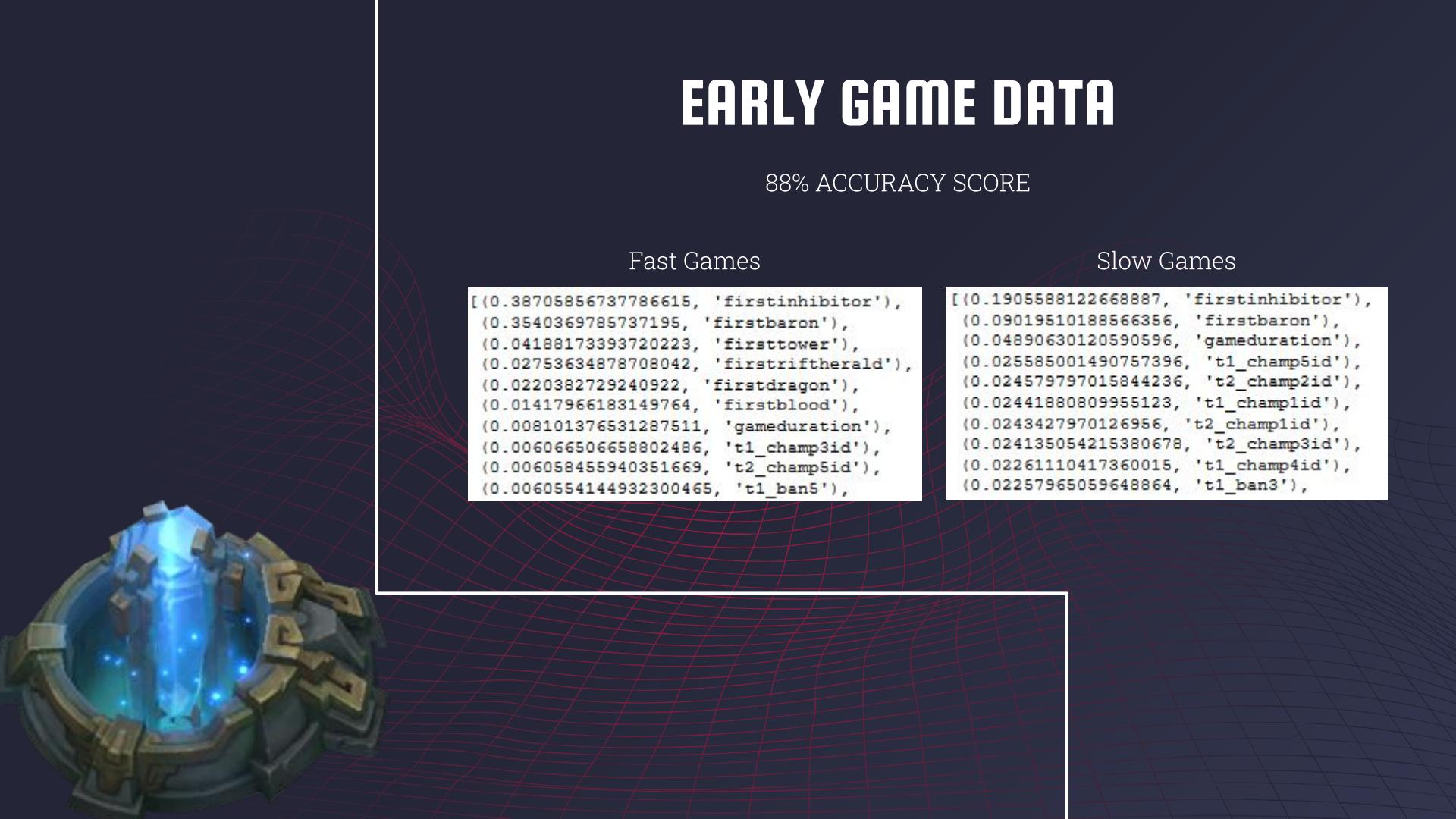


# PRE-GAME FACTORS

50% MODEL ACCURACY SCORE

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





# EARLY GAME DATA

88% ACCURACY SCORE

Fast Games

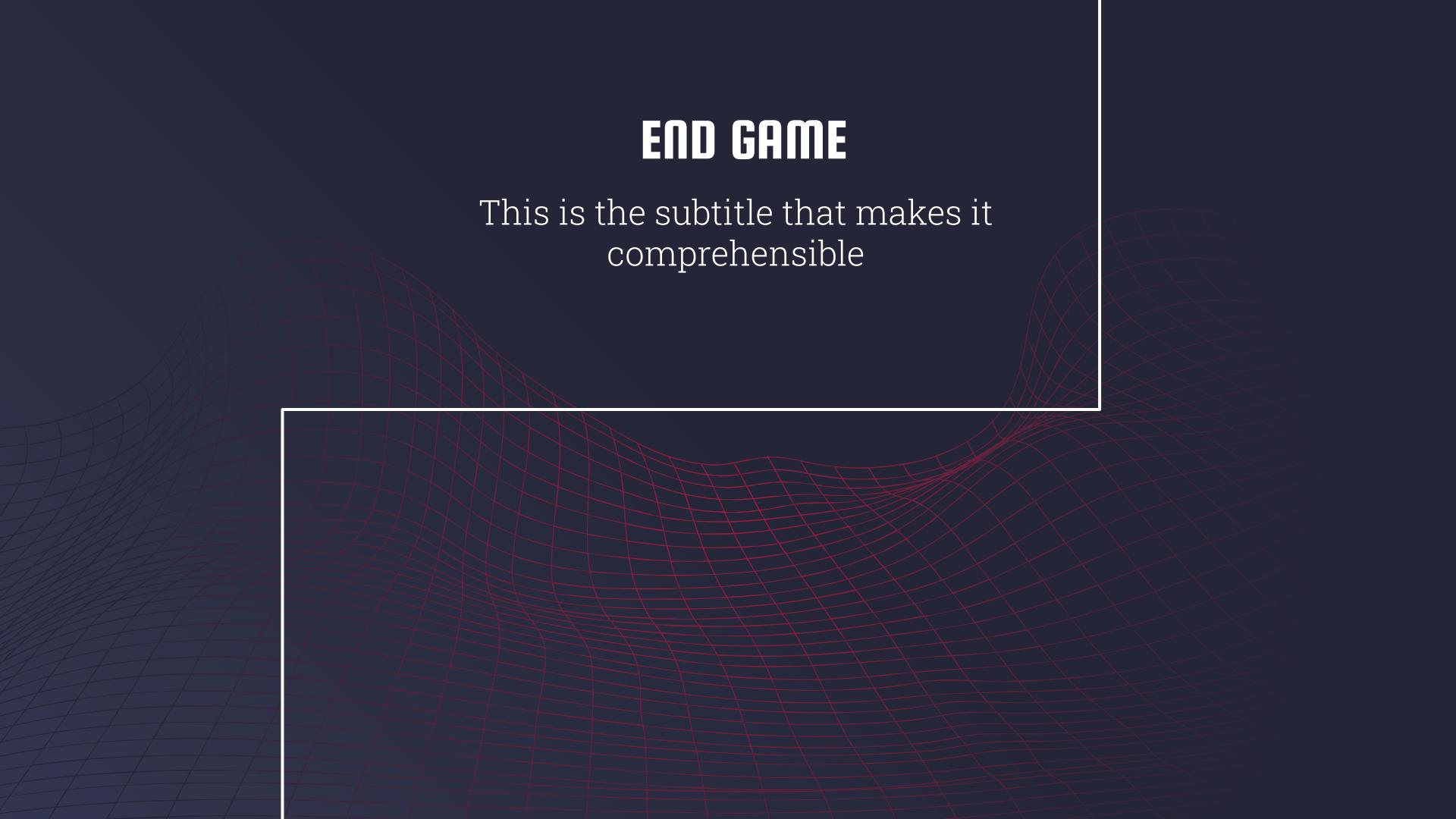
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[ (0.38705856737786615, 'firstinhibitor'),  
  (0.3540369785737195, 'firstbaron'),  
  (0.04188173393720223, 'firsttower'),  
  (0.02753634878708042, 'firstriftherald'),  
  (0.0220382729240922, 'firstdragon'),  
  (0.01417966183149764, 'firstblood'),  
  (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_champlid'),  
  (0.0243427970126956, 't2_champlid'),  
  (0.024135054215380678, 't2_champ3id'),  
  (0.02261110417360015, 't1_champ4id'),  
  (0.02257965059648864, 't1_ban3'),
```

# **END GAME**

This is the subtitle that makes it  
comprehensible



# THANKS!

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Does anyone have any questions?

# CREDITS

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