

# League of Legends Champions Recommender

Tung Viet Pham

## 1. Motivation

League of Legends is a very popular online game with over 100 million active monthly players and have become the largest online gaming community. With the rapid development of eSports, the League of Legends 2018 World Championship had the prize pool of over 6 million dollar and attracted at peak, over 200 million viewers at once. The game starts with two teams of five teammates, and their objective is to destroy the opponent's base. Each player will pick a champion who has unique skill set before each match. In the other hand, League of Legends has over 140 different champions, so that, knowing how to control all the characters efficiently is very challenging and time consuming. Most of the players only use and master about 5 champions to play the game. However, what if one is getting bored with his champions pool and want to try something new, or one just joins game and wants to explore? They would want to find other champions to play and gain new exciting experiment. Champions recommender application gives the players opportunity to find new champions, base on their given list, or simply help them find their favorite champion stats to improve their skills and ranks in game.

## 2. Overview

### 2.1 Data Sets

Champion Recommender uses the datasets of 180000 ranked games of League of Legends starting from 2014 to compare the similarity between all the champions were used in the games. (<https://www.kaggle.com/paololol/league-of-legends-ranked-matches>)

### 2.2 Features

Users can enter the champions name into search box to look for the champion stats such as number of games played, win matches, total points, role, and positions. The other feature is to let the users enter up to 3 champions and recommend them a similar champion. The users can specify the result by select the role, position, or the rank they want. The application later can be developed with more advance features such as recommending items to buy for each champion in each match, play style should be applied when playing against different champions.

### 2.3 Similar Applications

There are some applications in the internet have already implemented similar features <http://na.op.gg/>, <http://lolrecommender.com/>, <https://www.mobafire.com/>.