#### Who Should I Learn?



## Champion Recommender

Elliot Lefkovitz

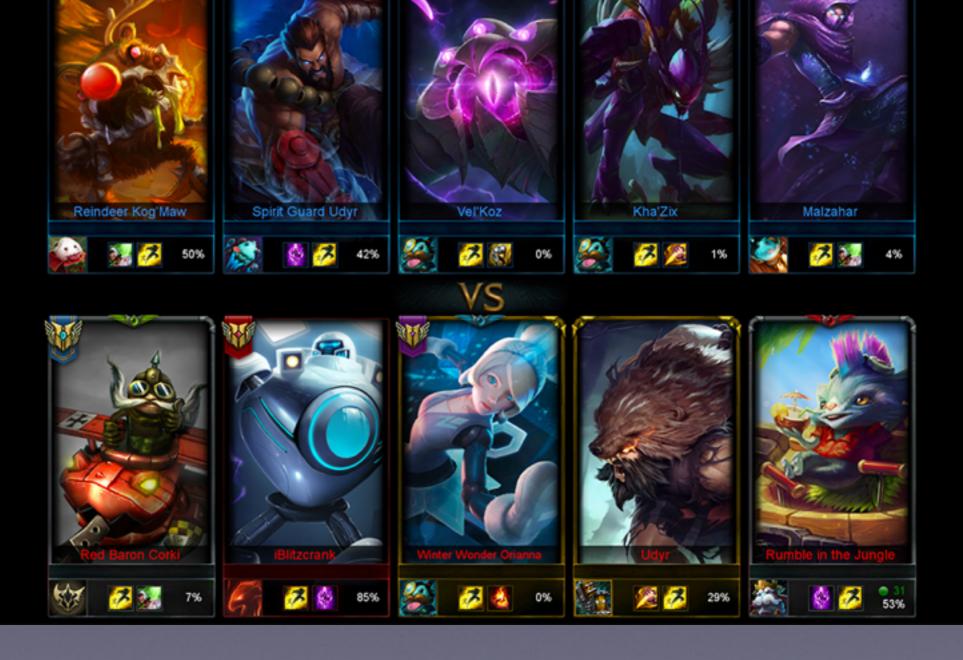
### Intro

League of Legends - 5v5 team-based game

#### **Every game:**

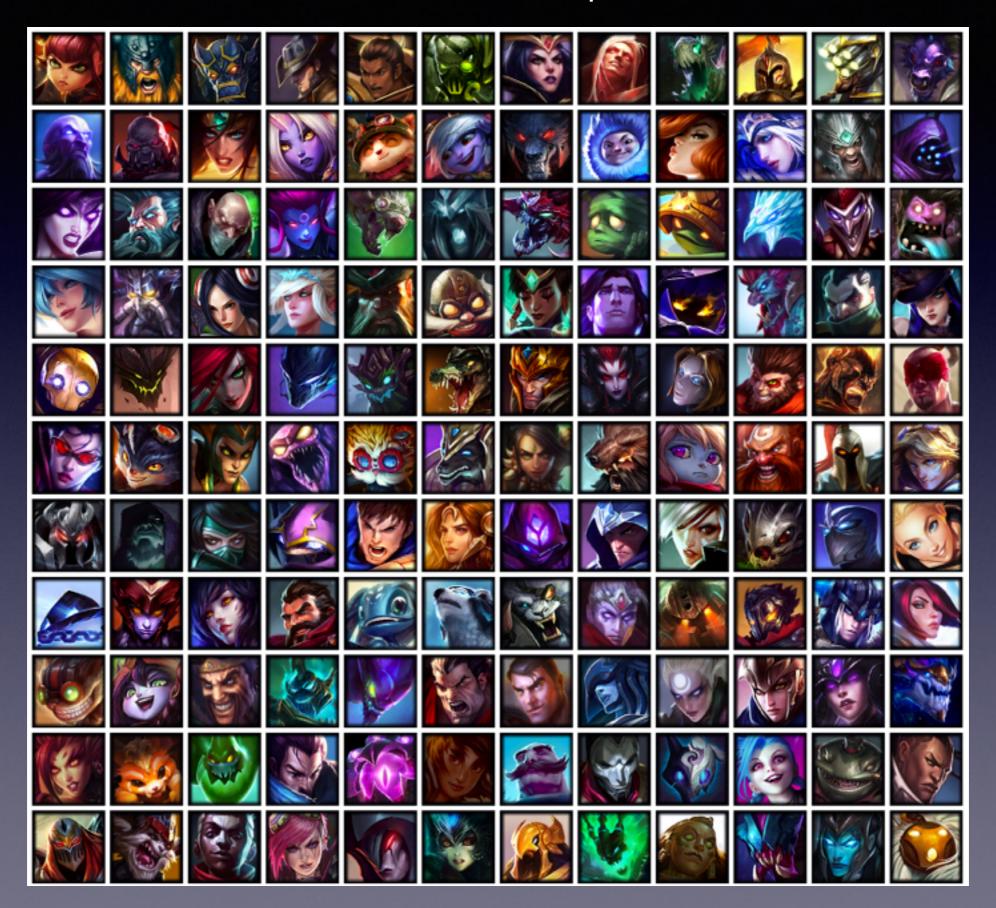
- Pick one of 5 roles
- 132 unique characters (Champions)
- Games last ~20-45min.

#### Team 1



Team 2

#### It's our turn to pick...



# Today's World

Too much time experimenting

Ex: 2 champions \* 5 roles \* 30 min \* 10 games = 50 hours

Easy burnout

Low switching cost

## Ideal World

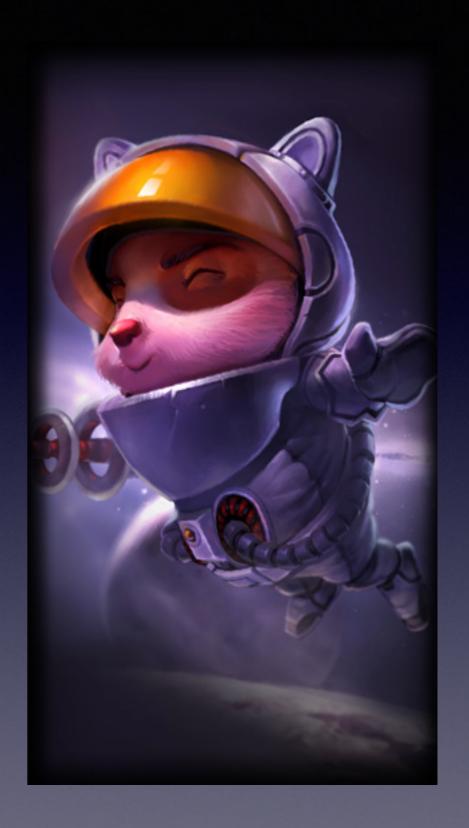
More time playing champions we love

More fun = more playtime

Long-term engagement = \$\$\$







## How It Works

Singular Value Decomposition (SVD) matrix

Input

	User1	User2	User3
Champ1	45	0	1
Champ2	10	0	30
Champ3	2	30	60

	[0,1]	[0,1]	[0,1]
7	[0,1]	[0,1]	[0,1]
	[0,1]	[0,1]	[0,1]

[0,1]

[0,1]

[0,1]

[0,1]

[0,1]

[0,1]

#### Prediction

User2

1.96

15.03

30

User3

1.02

29.99

60

User1

44.88

10.21

2.01

Champ1

Champ2

Champ3

/

[0,1]

[0,1]

[0,1]

## Live Demo

# Future Applications:

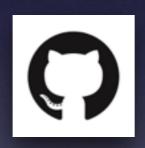
Incorporate win rate metrics

Apply to other games

# Thank you!



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