

LEAGUE OF LEGENDS RECOMMENDER APP

AGENDA

1 OVERVIEW

2 DATA & PIPELINE

3 MODELLING

4 ANALYSIS

OVERVIEW

OVERVIEW

THE GAME

- MOBA
- 157 different champions, variety of playstyles

WEALTH OF DATA

- 11 million daily active players
- Ease of access through Riot's API

EXISTING STAT-TRACKING APPS

- Widely-used existing apps like op.gg and u.gg
- Many great for stat-presentation, not analysis



OVERVIEW

THE GAME

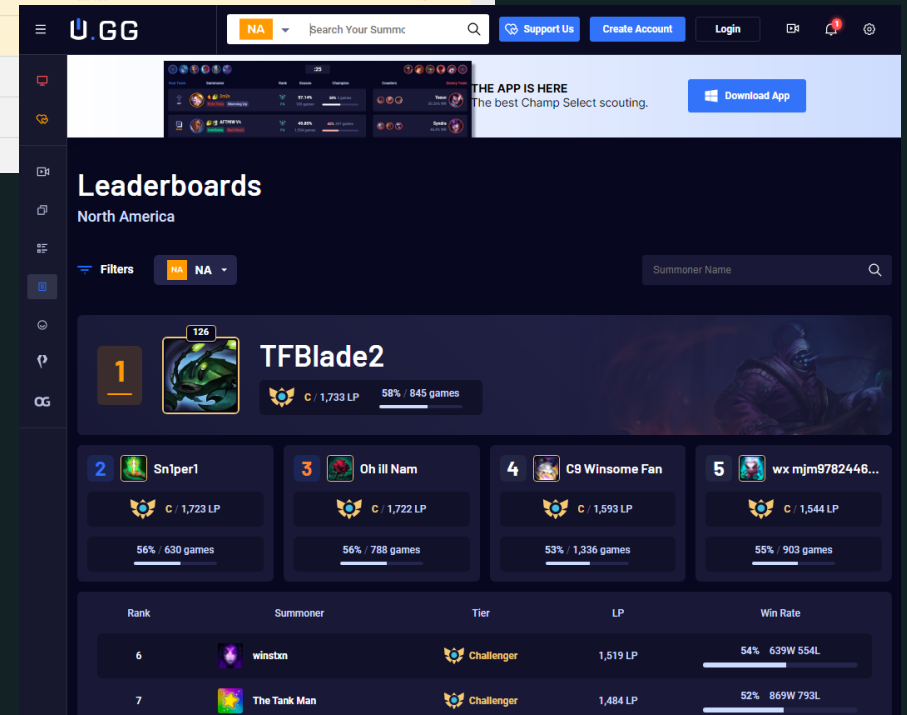
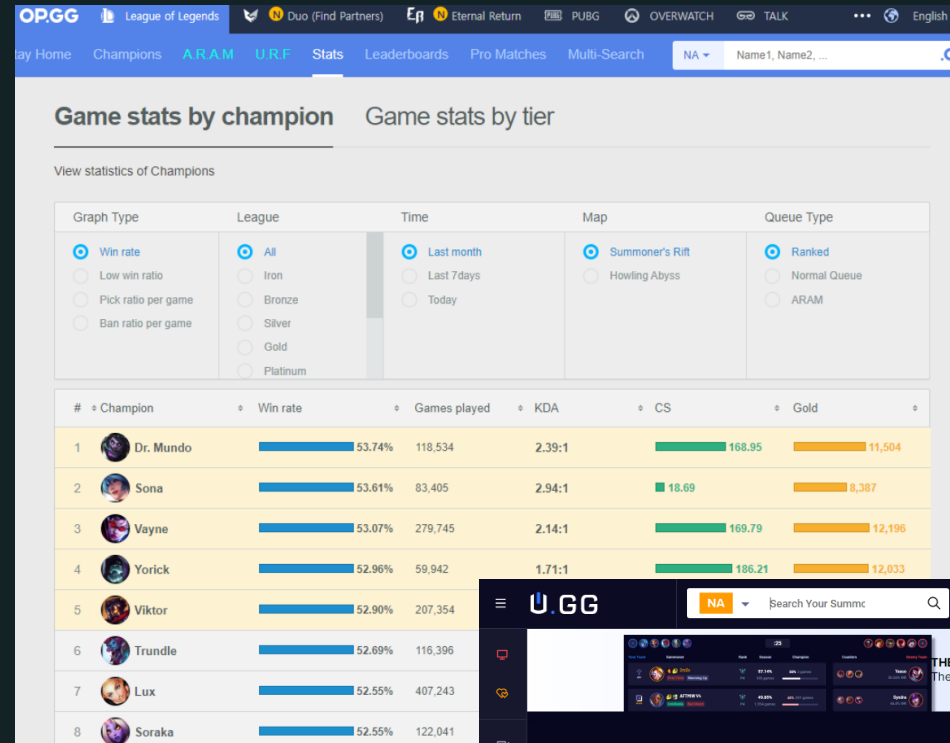
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CAN WE USE ML
METHODS ON THIS
DATA?

DATA AND PIPELINE

OUR DATA

~55,000 players from top 4 ranked divisions

50 most recent games for each player

<p>Ultimates an hour ago</p> <p>Victory 23m 40s</p>	 Nautilus	<p>3 / 7 / 21</p> <p>3.43:1 KDA</p>	<p>Level15</p> <p>28 (1.2) CS</p> <p>P/Kill 67%</p>		<p>Ashtonloo...</p> <p>imnoobisr...</p> <p>Hadesae6</p> <p>Number 2</p> <p>SKK1024</p>	<p>MrCabone</p> <p>ChrisHunt...</p> <p>browitbros</p> <p>Perchant</p> <p>jamaciaman</p>	
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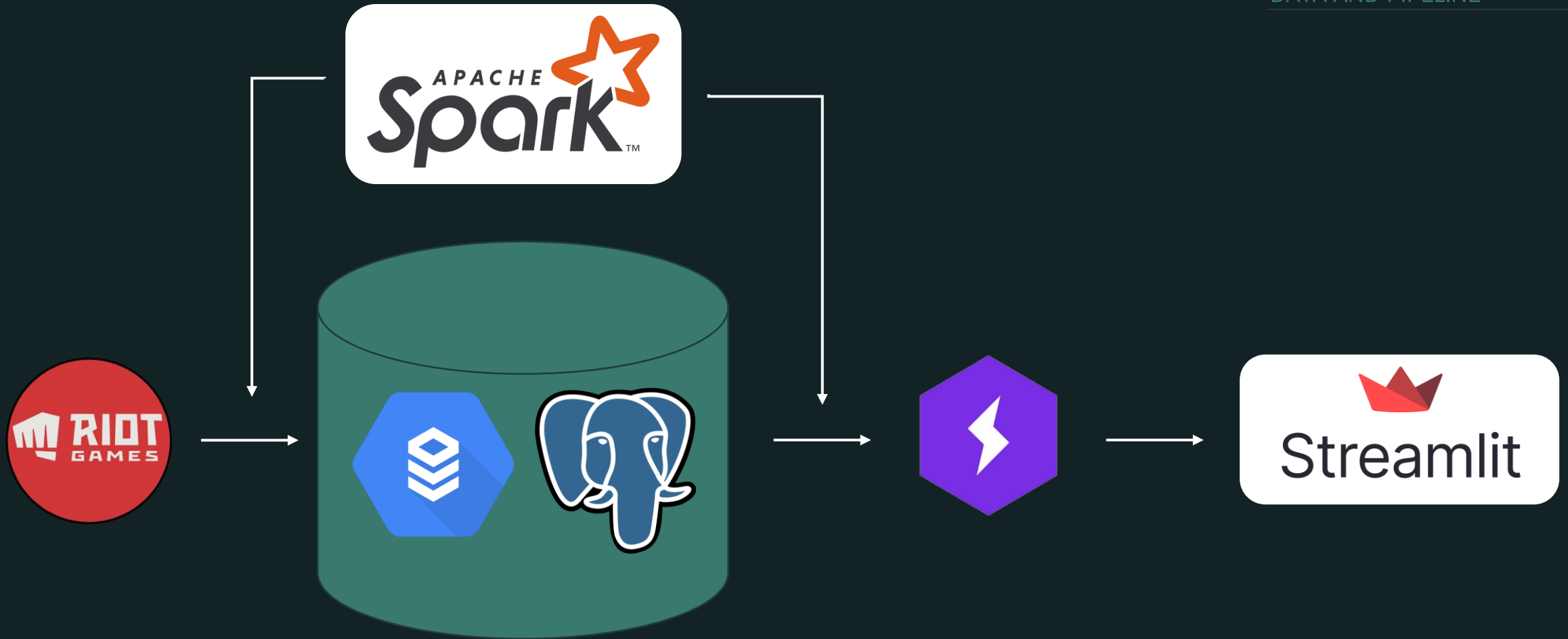
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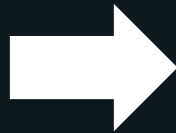
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MODELLING

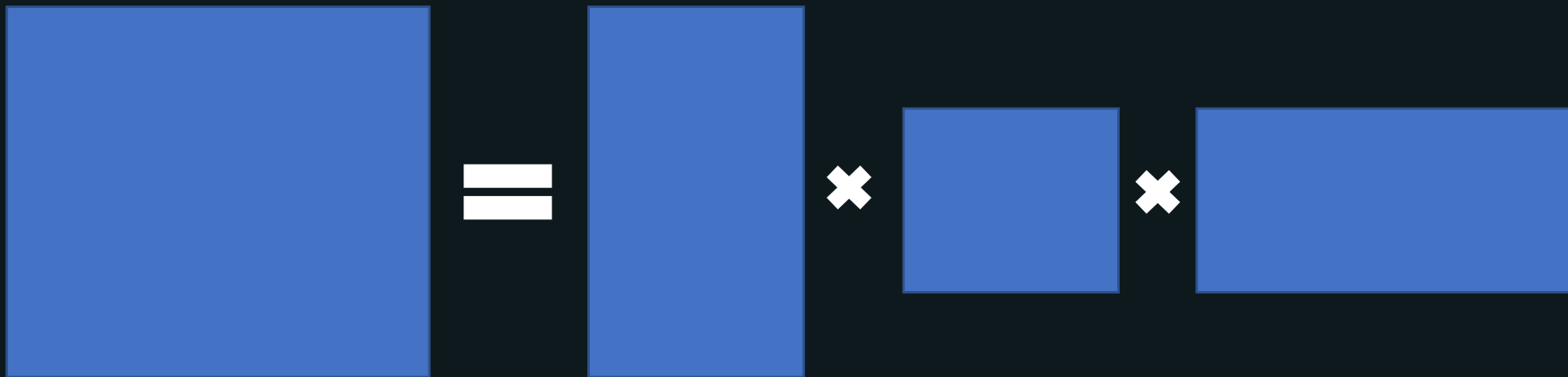
DATA VECTORIZATION



MODELING

- Started with basic SVD recommender

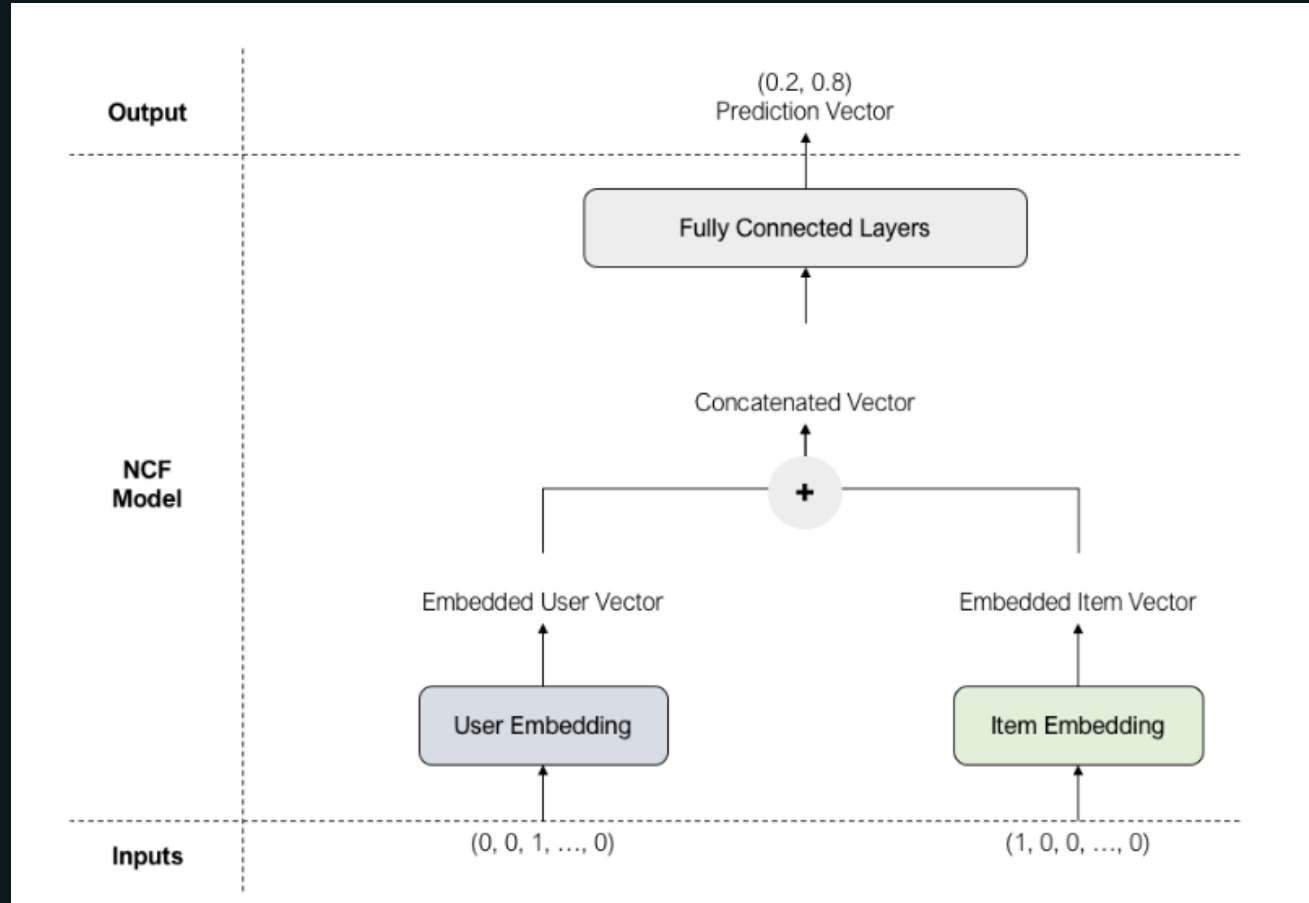
DIMENSIONALITY REDUCTION



MODELING

- Started with basic SVD recommender

USING DEEP-LEARNING



MODELING

- Started with basic SVD recommender
- Developed NCF model

ANALYSIS



ANALYSIS

TAKEAWAYS

- Establish scalable pipeline
- Development of webapp begun

LOOKING FORWARD

- Rate-limiting with current API key
- Train NCF model on large-scale data
- Finalize development of Streamlit application

THANK YOU!

CLOSING

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