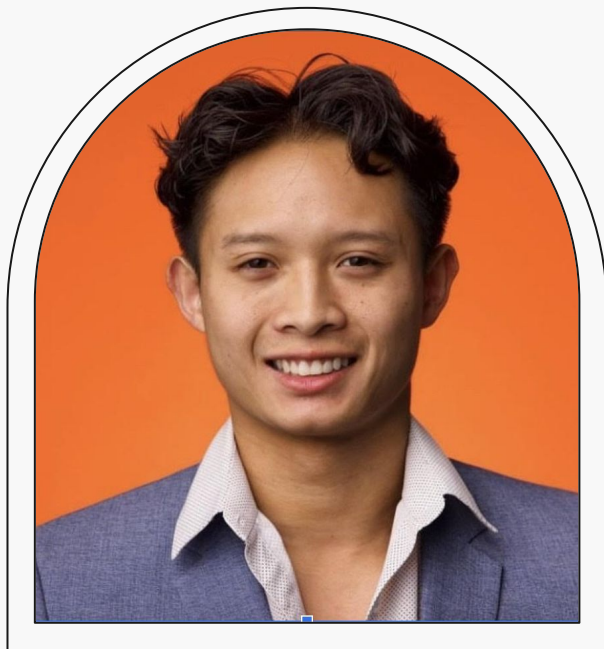


Movie Recommendation System for Likewise App

August 4, 2023



Our Team



Justin Phan

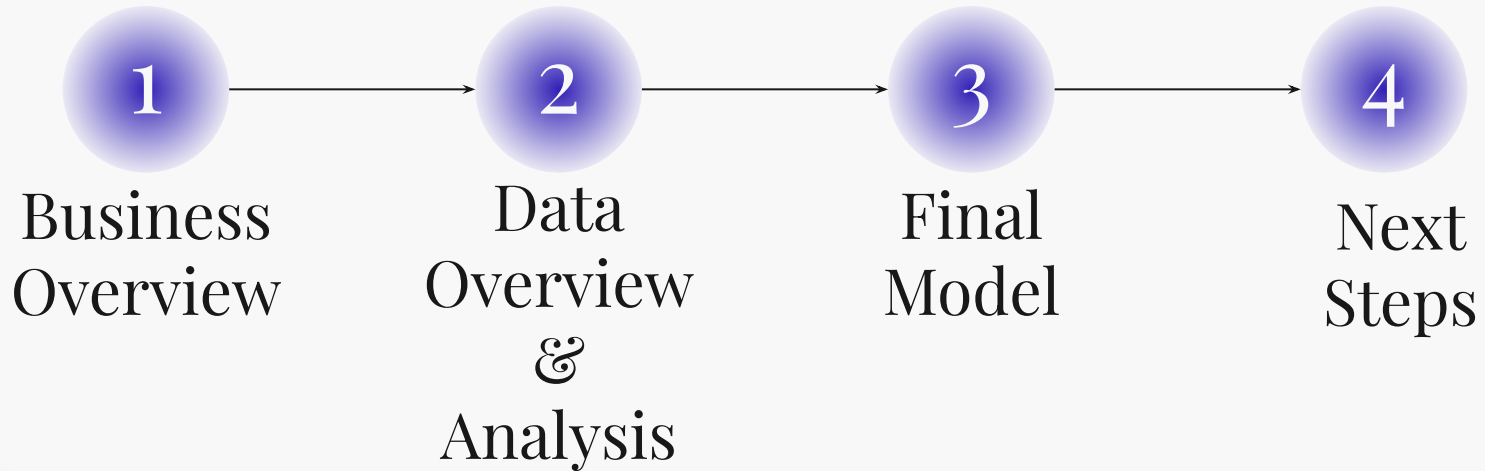
Technical Lead



Morgan Goode

GitHub/Presentation Lead

Agenda



✧ ✧ The answer to the cold start problem:
Hybrid Model of content + collaborative filtering ✧ ✧



1

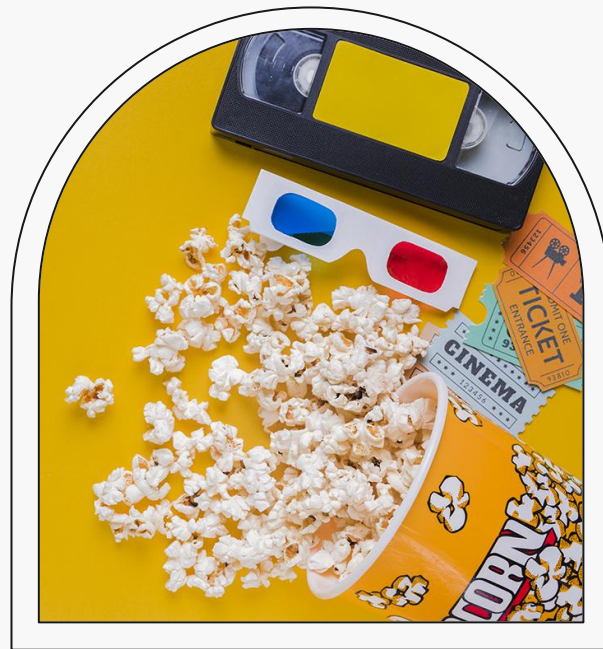
Business Overview



Business Overview



**LIKE
WISE**



2

Data Overview & Analysis



Data Overview

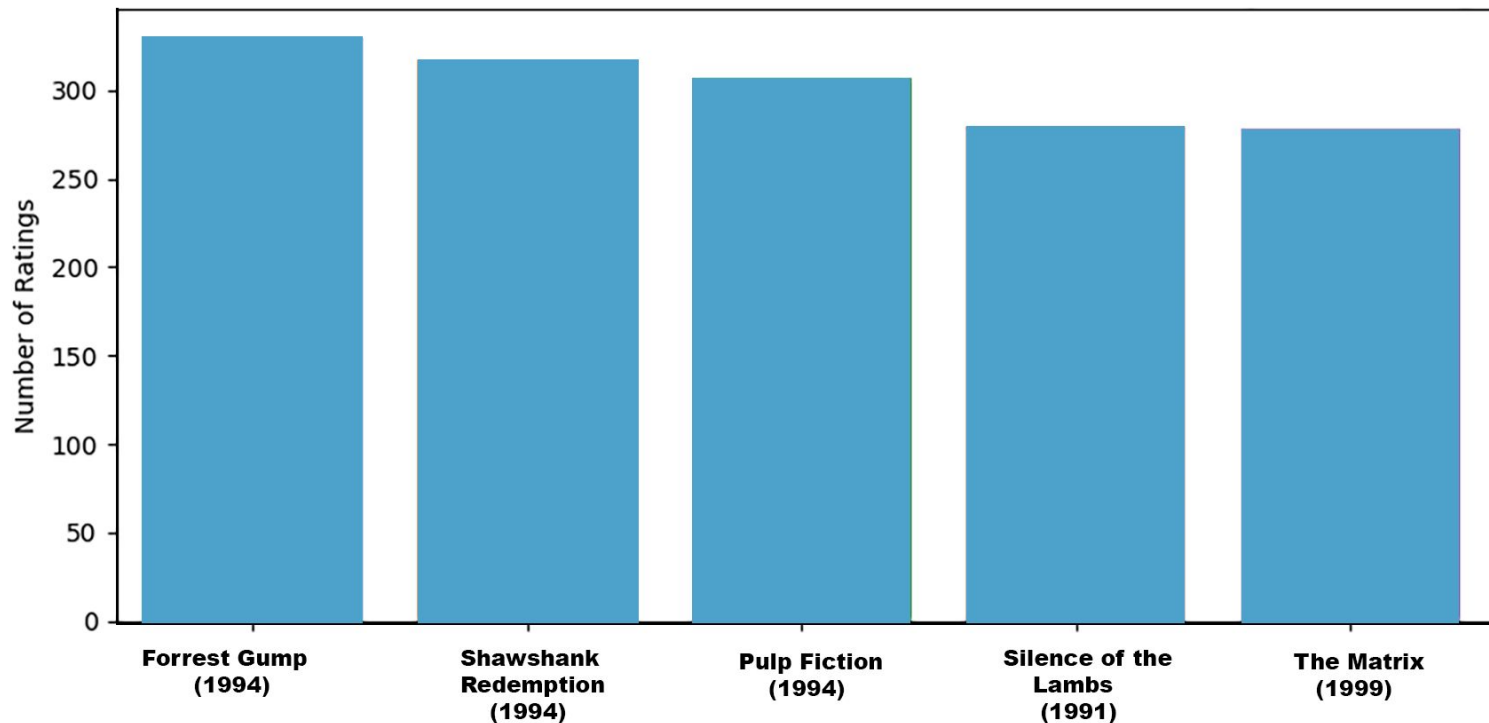


- MovieLens Dataset
- 1996 - 2018
- 610 users | ~ 100K ratings | 9.7K movies
- Limitations: size, dates

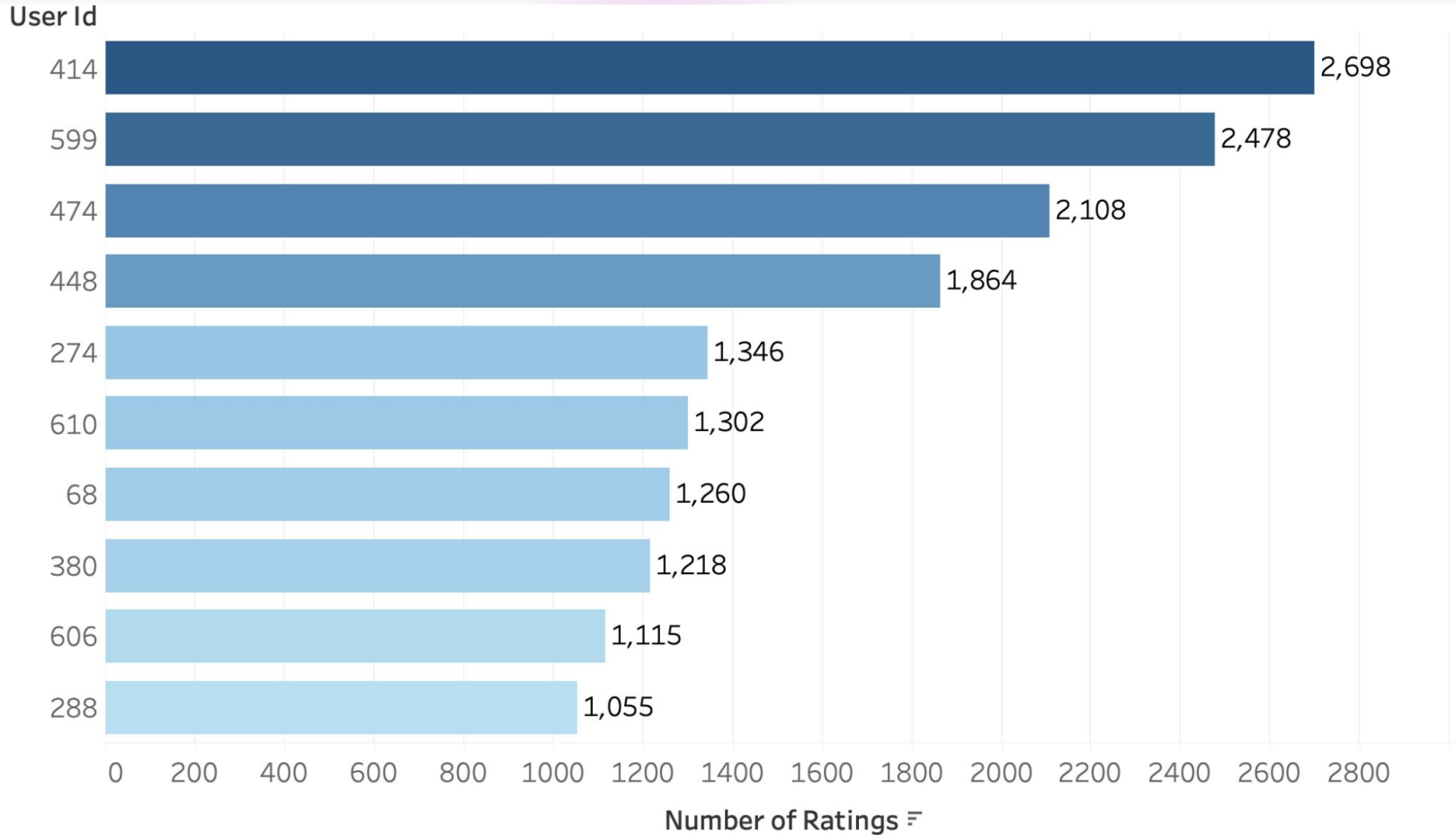




Most popular movies > 20 years old



Super users provide key input



3

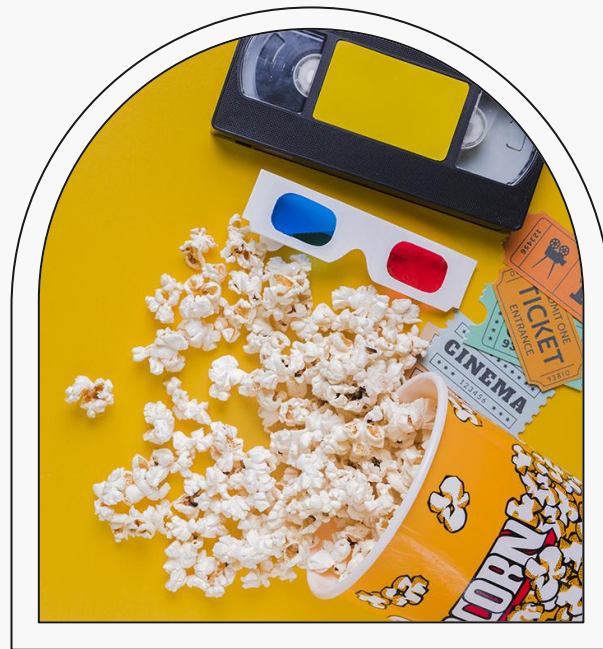
Final Model



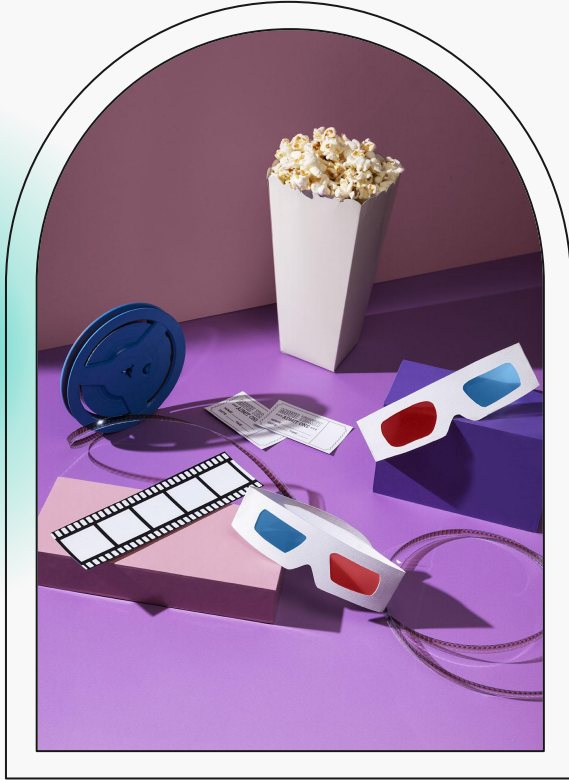
Hybrid Model

average difference of .79 stars

- Collaborative data from user and movie ID's
- Content data from bias features



Calculating Bias Improved Model Performance



Feature Importance By Weight

1. Movie ID
2. Movie Rating Bias
3. User Rating Bias
4. User ID



4

Next Steps

Next Steps

01

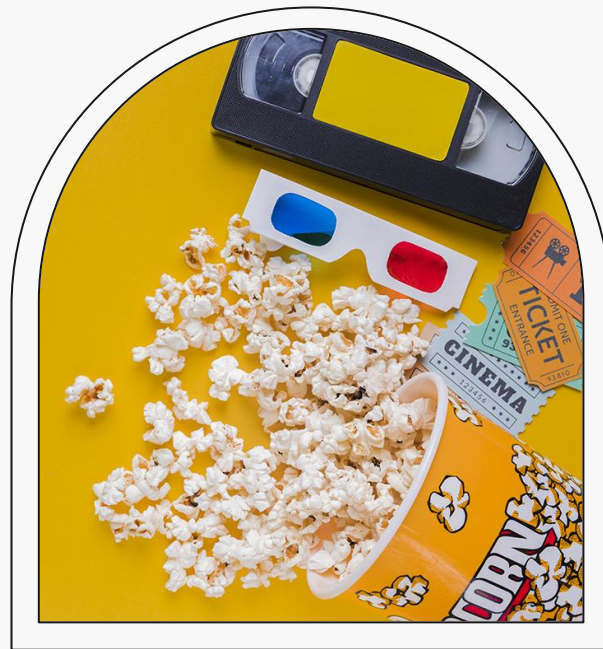
Larger dataset

02

Matrix Factorization

03

Neural network



Thanks!

Any questions?



Justin Phan
Technical Lead



Morgan Goode
GitHub/
Presentation Lead

