

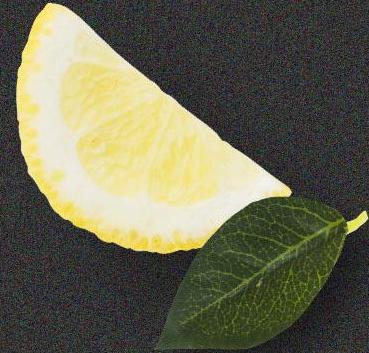
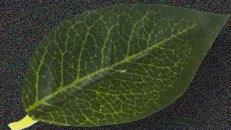


Let's Tap into your Tastes

A Beer Recommendation System

BEFORE WE BEGIN...

I am Sean Conlon, a Data Scientist.





OUR AGENDA

01

Data Overview

About the Data used,
based on beer!

02

Models

Modeling and Results

03

Recommendations

Based on models, what
I recommend

04

Future Insights

Next Steps from here





The Bottom Line

Breweries across the United States
deserve more recognition



01

DATA OVERVIEW



SOME HOPPIN' GOOD DATA

Data Acquisition

01

The Top 50 Breweries in the US
containing reviews of many of their
popular beers (2004-2011)

02

Data Filtering

Merged 2 large datasets together,
filtering by United States Breweries

03

Data Limitations

59% of Data is from California
Breweries, impacting beer types



WHY ONLY UNITED STATES BREWERIES?

24%

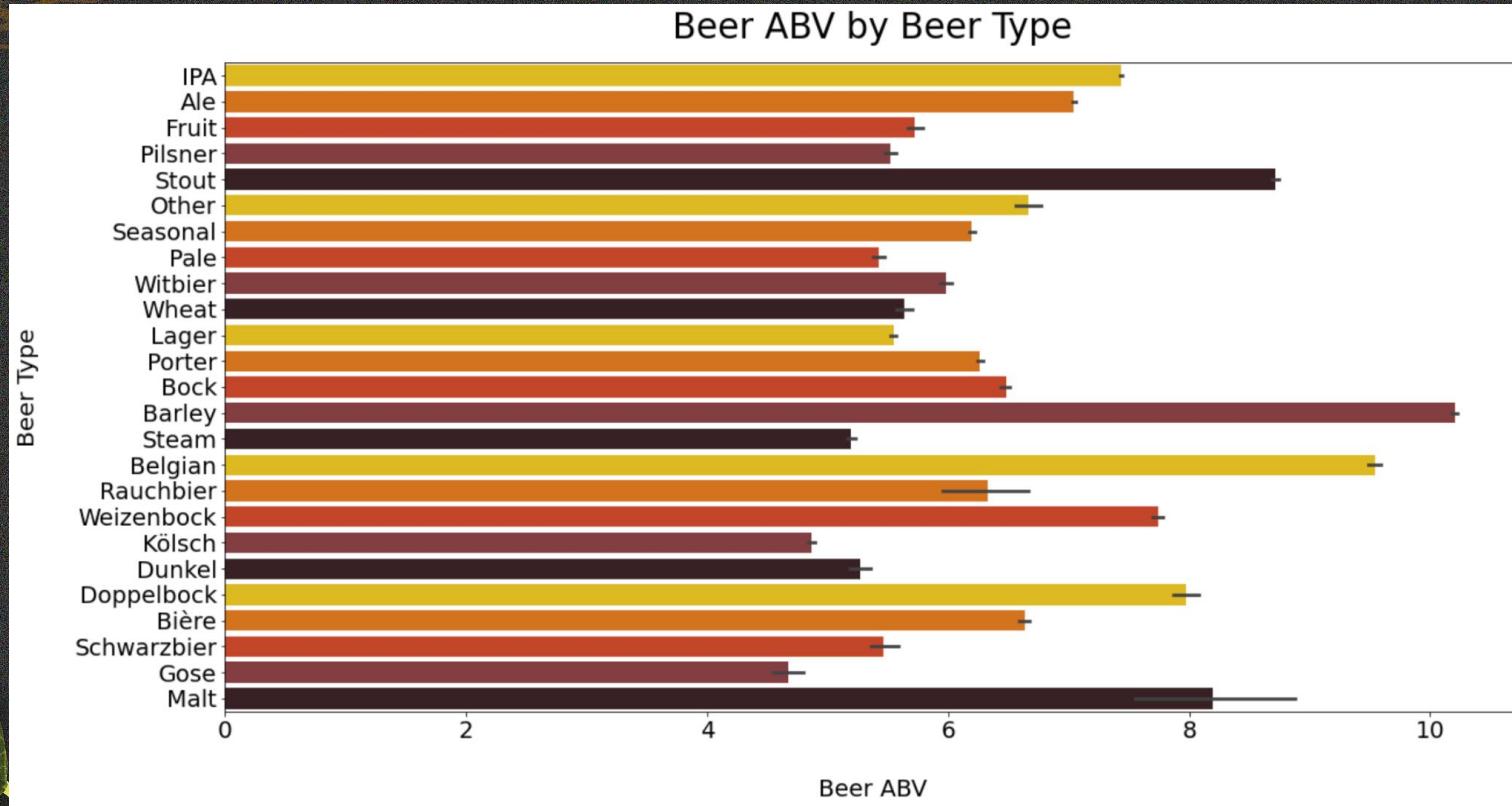




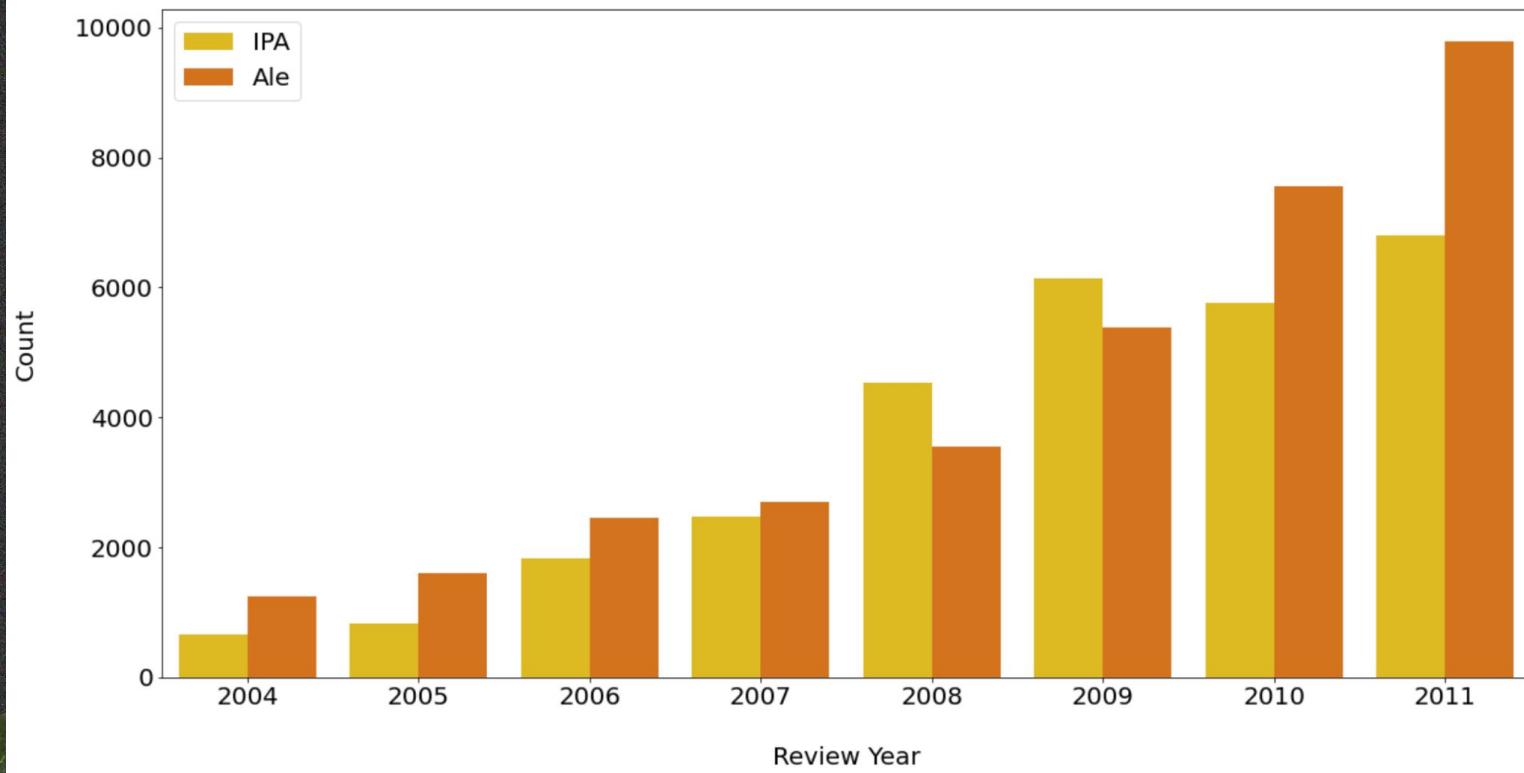
02 MODELS & RESULTS

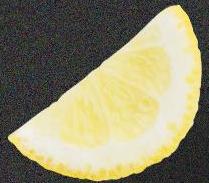


Beer ABV by Beer Type



CA Beer Types by Review Year





ACCURACY OF SYSTEMS

70%



Collab-Based Model

Based on User's Reviews,
Average Error is 0.30.

90%



Content-Based Model

Based on Alcohol %,
Average Error is 0.1.



20 - 40% OFF

Average vs. Predicted Scores





BREWERIES NEAR YOU

```
latitude = 40.70542603644052
longitude = -74.01387181694061
recommend_beers(latitude, longitude, locate_df)
✓ 0.3s
```

Brewery 1: Brooklyn Brewery
Top 5 beers: ['Brooklyn Black Chocolate Stout', 'Brooklyn Lager', 'Brooklyn Monster Ale', 'Brooklyn Brown Ale', 'Brooklyn East India Pale Ale']

Brewery 2: Trap Rock Restaurant & Brewery
Top 5 beers: ['Kestrel's Joy IPA', 'Ghost Pony Helles Lager', 'Chainsaw Double IPA', 'Hathor Red Lager', 'Schroeder Weiss']

Brewery 3: Port Jeff Brewing Company
Top 5 beers: ['Port Jeff Porter', 'Low Tide Black IPA', 'Schooner Ale', 'Boo Brew', 'Cold North Wind']

Brewery 4: Blue Point Brewing Company
Top 5 beers: ['Hoptical Illusion', 'Blue Point Toasted Lager', 'Blue Point Rastafa Rye Ale', 'Blue Point Blueberry', 'Blue Point Winter Ale']

Brewery 5: The Ship Inn
Top 5 beers: ['Best Bitter', 'Extra Special Bitter', 'Golden Wheat Light', 'Killer Bee', 'Spring Mild']

Python



03

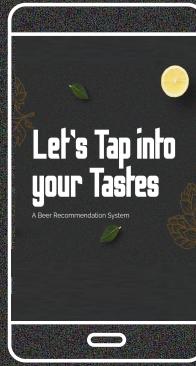
RECOMMENDATIONS



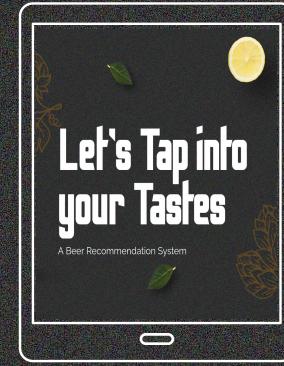
MOCKUPS



WEB-BASED APPS



SMARTPHONE APPS



TABLET APPS





04 FUTURE INSIGHTS





A PITCHER IS
WORTH A
THOUSAND
WORDS

THANK YOU

Do you have any questions?



[Github.com/seanconlon29](https://github.com/seanconlon29)



[Linkedin.com/in/seanconlon29/](https://www.linkedin.com/in/seanconlon29/)

CHEERS!



References

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- <https://www.forbes.com/sites/garydrenik/2021/09/21/85-of-products-fail-when-companies-dont-talk-to-consumers-this-company-is-changing-that/?sh=26f89c292aa2>
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