

Chaquayla Halmon

# Overview

What will we be going through?



**Business Problem** 

Data

**Process** 

**Final Model** 

**Recommendations** 

**Future Research** 





#### Business Problem:

As an app developer, you need to find a way to make your apps more popular on Google App Store.

What features need more attention?

# DATA

#### From:

Google dataset from Kaggle - over 10k data points

Web Scrape new data from Google Play Store obtained over 2.8k data points

**Total: 13680 datapoints** 

#### What?

**Types of columns:** 

Numerical - Price, app size, ratings, etc

Descriptive - category, content rating, app name, etc

## Final DataSet

After cleaning and getting rid of missing information the final dataset has 11,822 data points.

# Process

### **Baseline Model**

Used four different models:

Linear regression - 32.5%

KNN regressor - 33.9%

Decision Trees - 31.6%

Random Forest - 43.8%

### **Re-Model**

Linear regression - 54.5%

KNN regressor - 58.8%

Decision Trees - 48.6%

Random Forest - 60.8%

## Import/clean data

After combining the two datasets. Clean the missing data and drop any unneeded columns.

## **Fine Tuning**

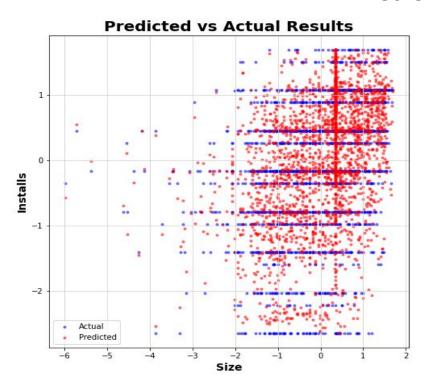
To get better results, got rid of outliers, log transform continuous variables, more cleaning, etc.

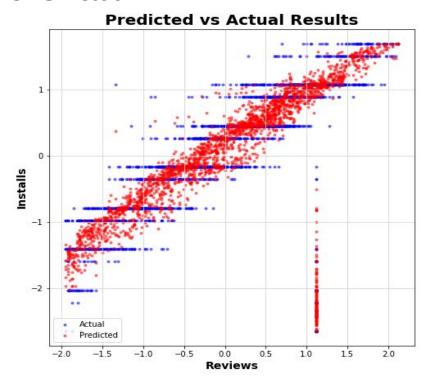
## **Final Model**

KNN regression - 50.4% KNN regressor - 21.4% Decision Trees - 88.9% Random Forest - 90.3%

# Final Model

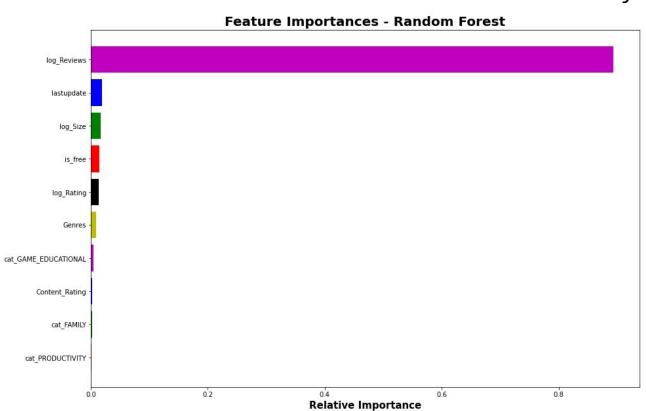
## **Predictions VS Actual**





# Final Model

## Random Forest 90.3% Accuracy





# Recommendations

Start the cycle

Out with the old

Trending

Size

Market your App to get more installs that will in return get more reviews that can lead to more installs.



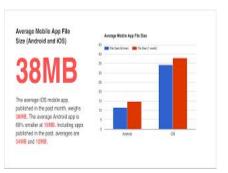
Focused on timely updates for your apps. Eliminate potential bugs and keep the consumers engaged with new content.

Communication, family, and gaming apps are the way to go, to get high installs, reviews, and rating.

Focus on making apps no bigger than 200 megabytes.







# Future Research

- Profits research the difference in free, freemium, paid, subscriptions, etc.
- Time Series look into the progress of apps over a period of time and document churn rate.
- Sentiment Analysis look into what consumers like about certain categories and look for improvements

# CONNECT WITH ME



Chaquayla Halmon

Github for other projects:

https://github.com/halmonchaquayla

Linkedin to network:

https://www.linkedin.com/in/chaquayla-halmon-605747201/

Medium to check out my blog:

https://halmonchaquayla.medium.com/

