# IOS App Rating Make Your App Popular Today

Eileen Zhang

## Why This App?

- Smartphone Apps occupy a huge position in everyday life
  - Rating closely associates the success of an App
- Developers could make modification based on predicted score
  - Improve user experience
    - Generate more revenue

#### Data

- Kaggle
- Two datasets
  - AppleStore.cvs
  - appleStore\_description.csv
- Final merged dataset
  - Target: user\_rating
  - 15 Predictors: 7 numeric, 8 categorical
  - Size\_bytes, price, supported device number, screenshots number, supported language, total rating received so far, content\_rating (3 dummy variable), prime genre (3 dummy variable), description length, whether description contains "game" and whether if the app is free.
  - o 7197 records

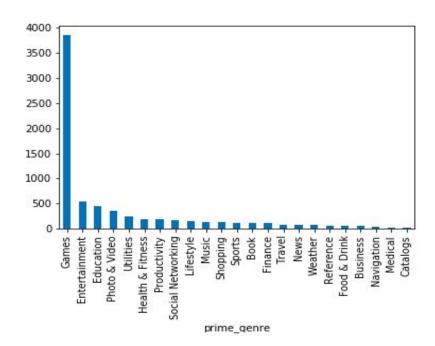
#### Model

- Linear regression (baseline)
- Random Forest
  - Min\_samples\_leaf: 6
  - Min\_samples\_split:5
  - N\_estimators: 500
- Xgboost
- Train vs validation set: 0.8/0.2
- 5 fold cross-validation
- Success metrics
  - R squared
  - Accuracy

	Linear Regression	Random Forest	Xgboost
R squared	0.396	0.6024	0.6021
Accuracy	0.74	0.86	0.82

### Rating Count is the Key to Success

- Most important features:
  - Rating\_count\_before: 0.59
  - o Is Game: 0.12
- Game is the largest category





Email: yufeizhang2020@u.northwestern.edu

Github: https://github.com/Eileenzvf/MSiA423-Eileen-Project-2019

Phone: 312-316-2836