



# Video Game Popularity

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# The Problem:

A Game Designer wants to know what features to include in their next video game to help increase the chances of the game being considered “Popular”.



# Who can this benefit?

Large Game Publishers:



Small Publishers:



Independent Artists:



## What are some features we looked at?

- Price
- Length of Game
- Setting
- And More!
- Camera Angle
- Genre
- Game Play

# About the Data

The Data we looked at was pulled from Steam. We utilized the ratings to determine popularity and compared to the tags and other features.

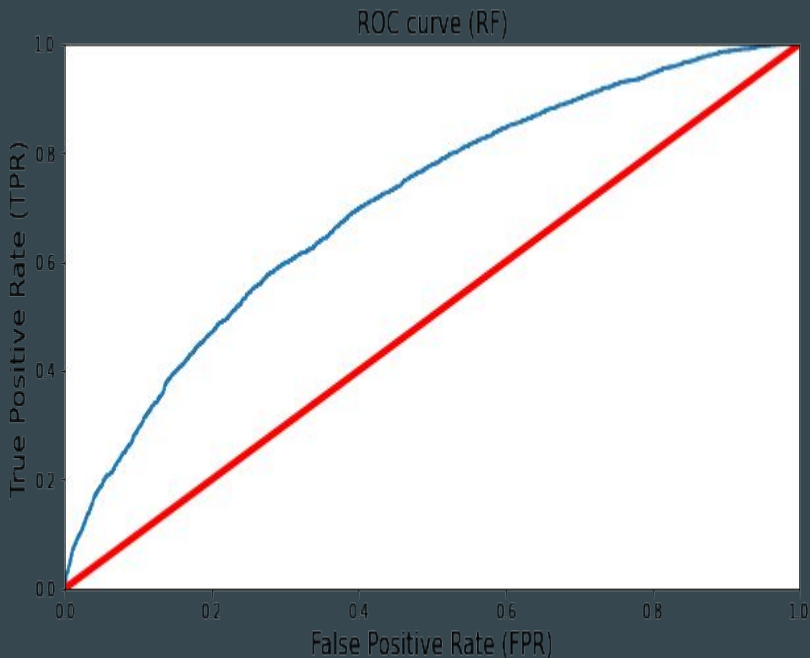


# The Model

We are using a Random Forest Model

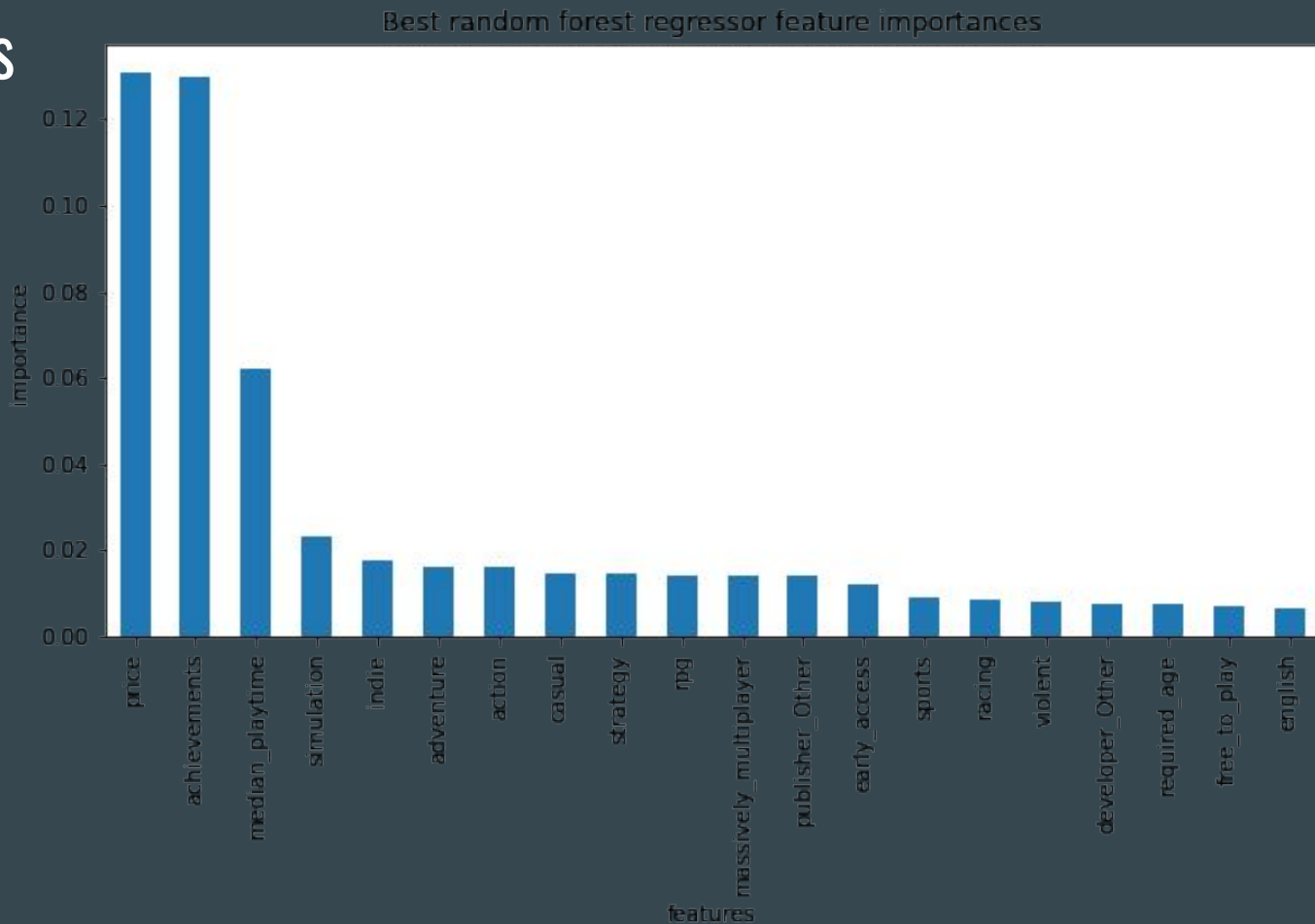
The final ROC-AUC Score: 0.706

This means our model has a 70.6% chance of correctly classifying if a game will be popular or not based on its features.



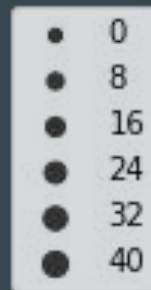
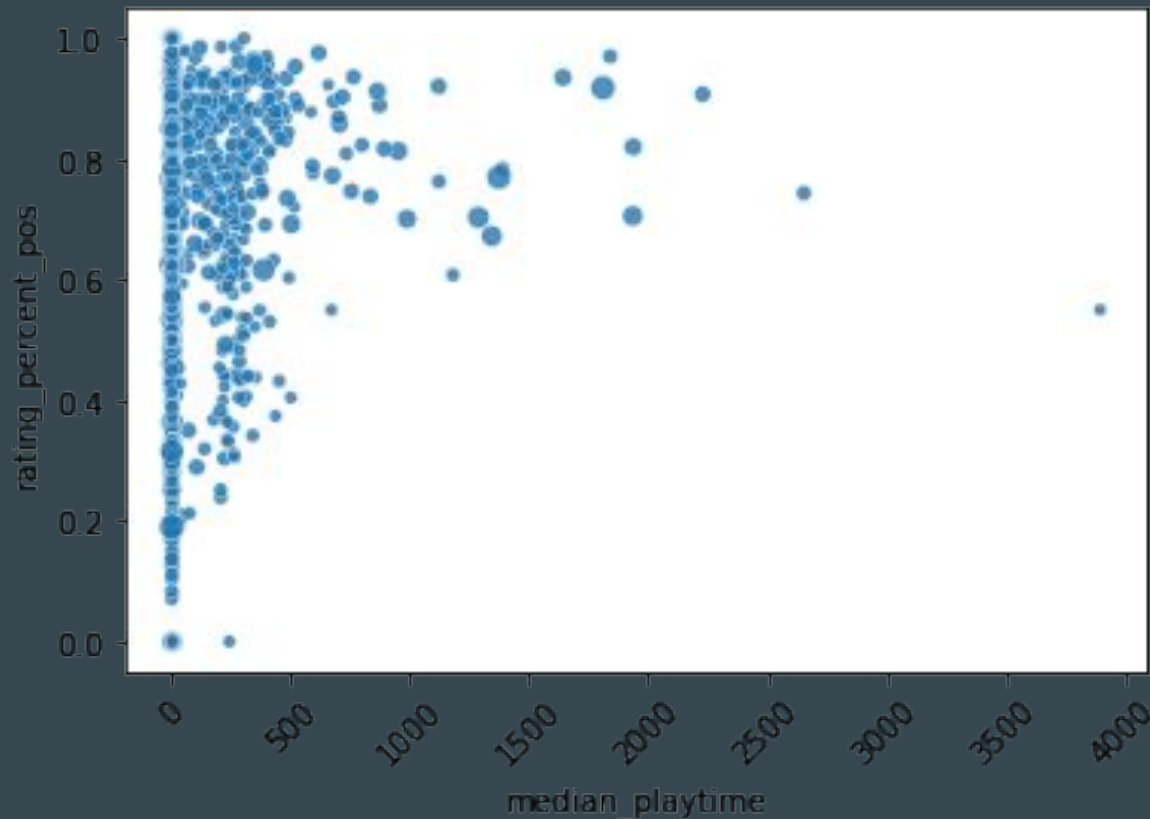
# Popular Features

- Price
- Achievements
- Playtime
- Genre
- Casual
- Multiplayer
- Indie
- Early Access



# Playtime Exploration

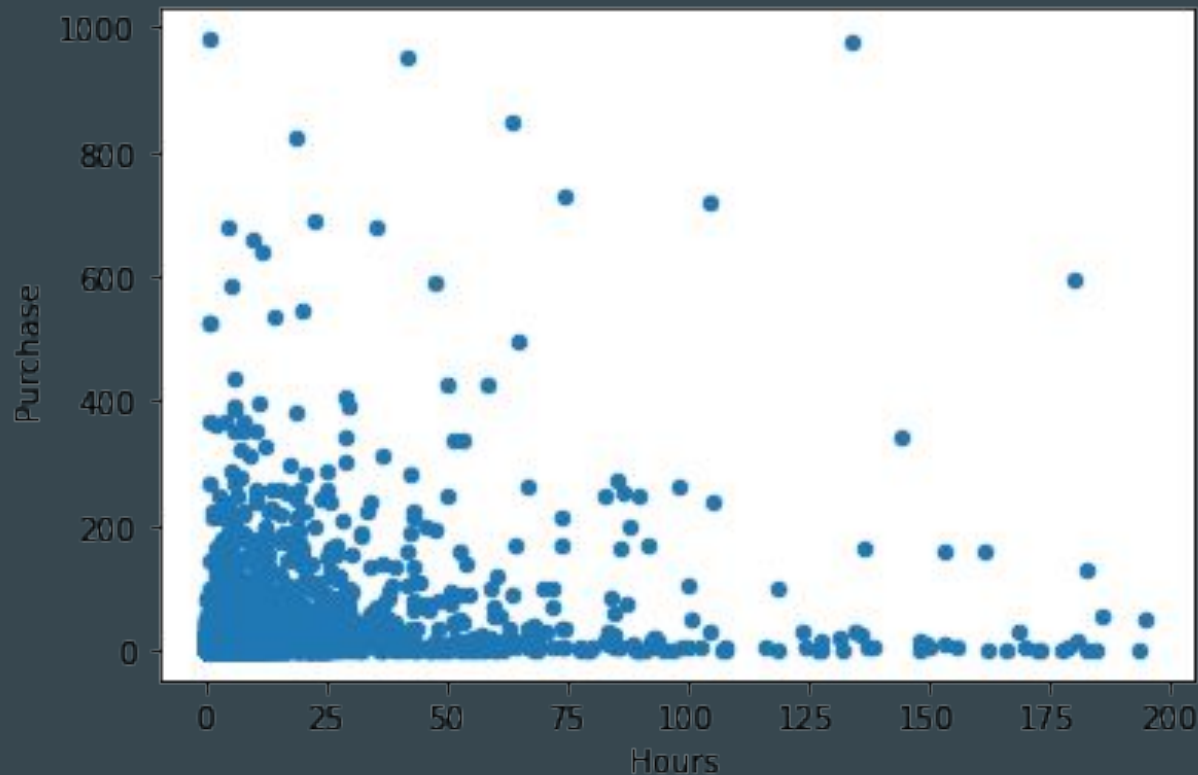
Longer Game = Better Rating



Note: This Graph is in Minutes.  
1000 minute = 16.7 hours



# Playtime Exploration

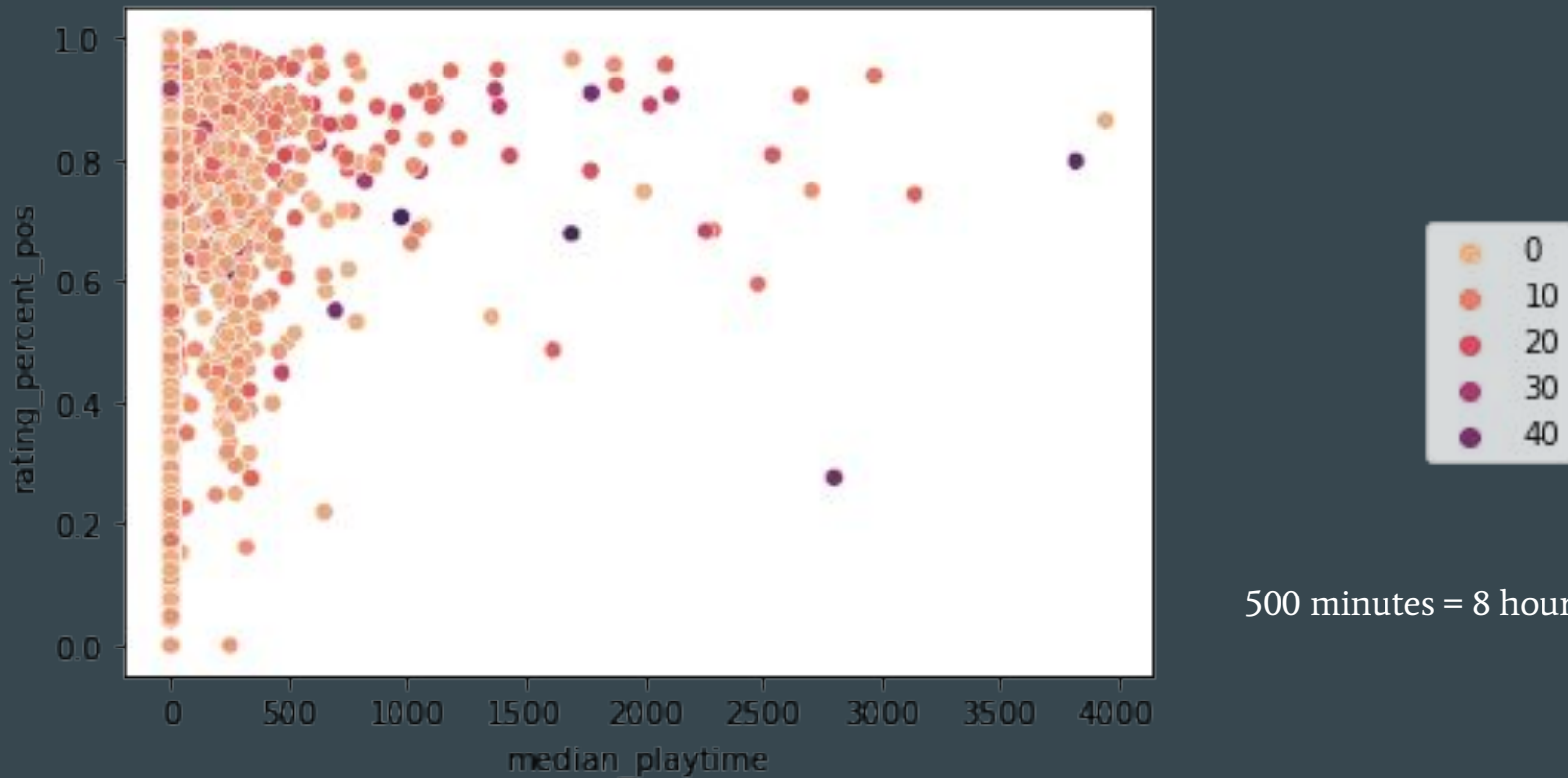


Too Long = Fewer Sales

Because of this we  
recommend a game  
between 16 and 50 hours of  
playtime

# Price Exploration

\$10 - \$20, but needs further exploration once the game is created.



500 minutes = 8 hours

## Future Work

- Look at alternate datasets to see if they agree with our best features.
- Create an analysis to best decide the price of the game
- Perform analysis to decide the number of achievements.

# Conclusion

- Playtime: 16 - 50 hours
- Make note of possible achievements
- Genre: Simulation, Indie, Adventure, Action, Strategy, RPG, Sports, Racing
- Indie is GOOD!!!
- Multiplayer and Casual player options
- Early Access!!!

# Thank you, GLHF!

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Report:

[https://github.com/mlu004/Video\\_Game\\_Popularity/blob/main/Video\\_Game\\_Popularity\\_Report.pdf](https://github.com/mlu004/Video_Game_Popularity/blob/main/Video_Game_Popularity_Report.pdf)