# WHAT MAKES A GOOD GAME?

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# MISSION

To combine video game reviews with plot summaries and gameplay information, and use natural language processing techniques to predict critical reception

# DATA

THE REAL STUFF

# BUILDING THE DATASET

## METACRITIC

Professional reviews

User reviews

ESRB Ratings

## VGCHARTZ

Global/regional sales

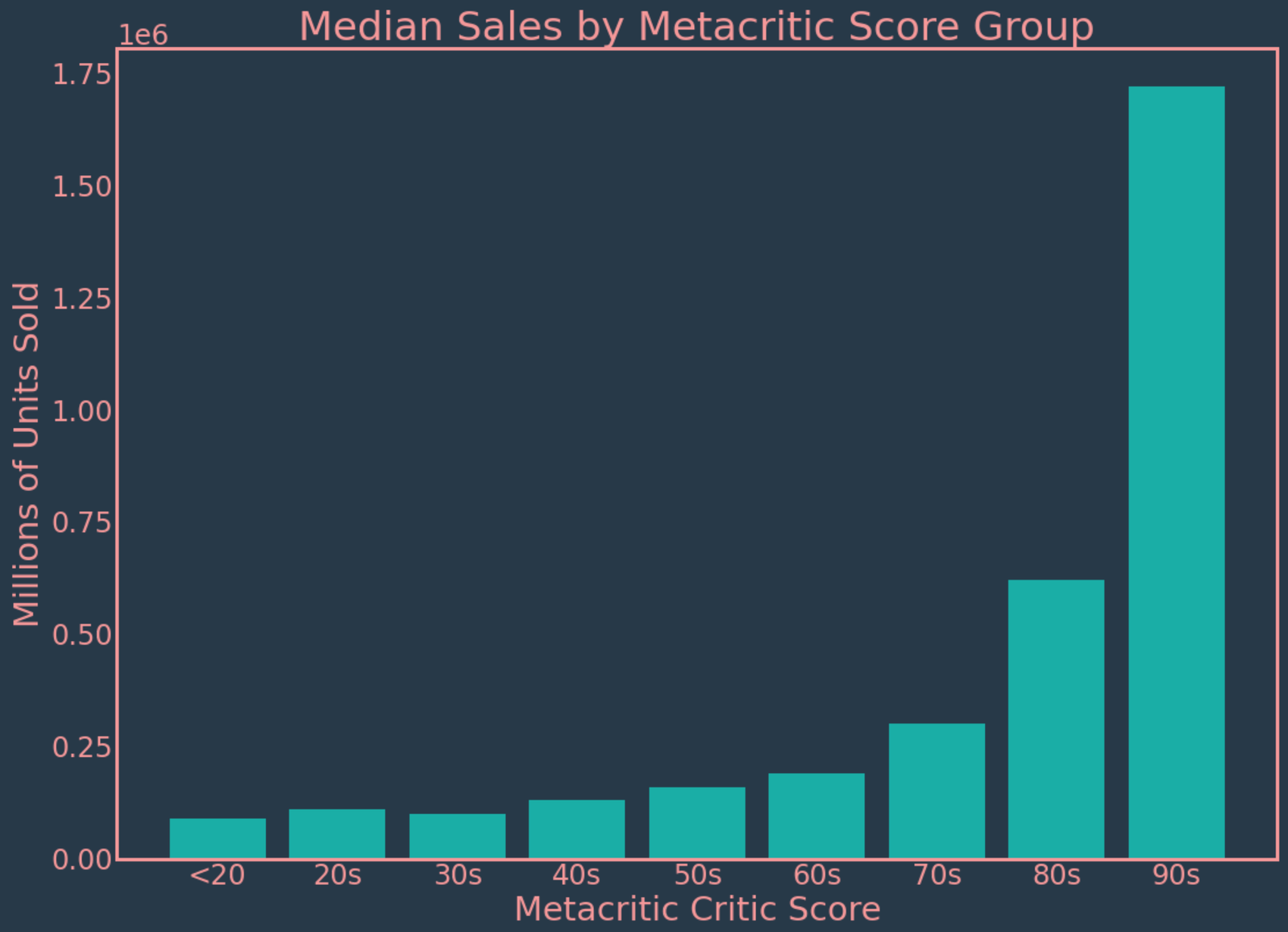
Release dates

## WIKIPEDIA

Plot summaries

Gameplay details

5500+ complete entries




# TARGETING CRITIC SCORES

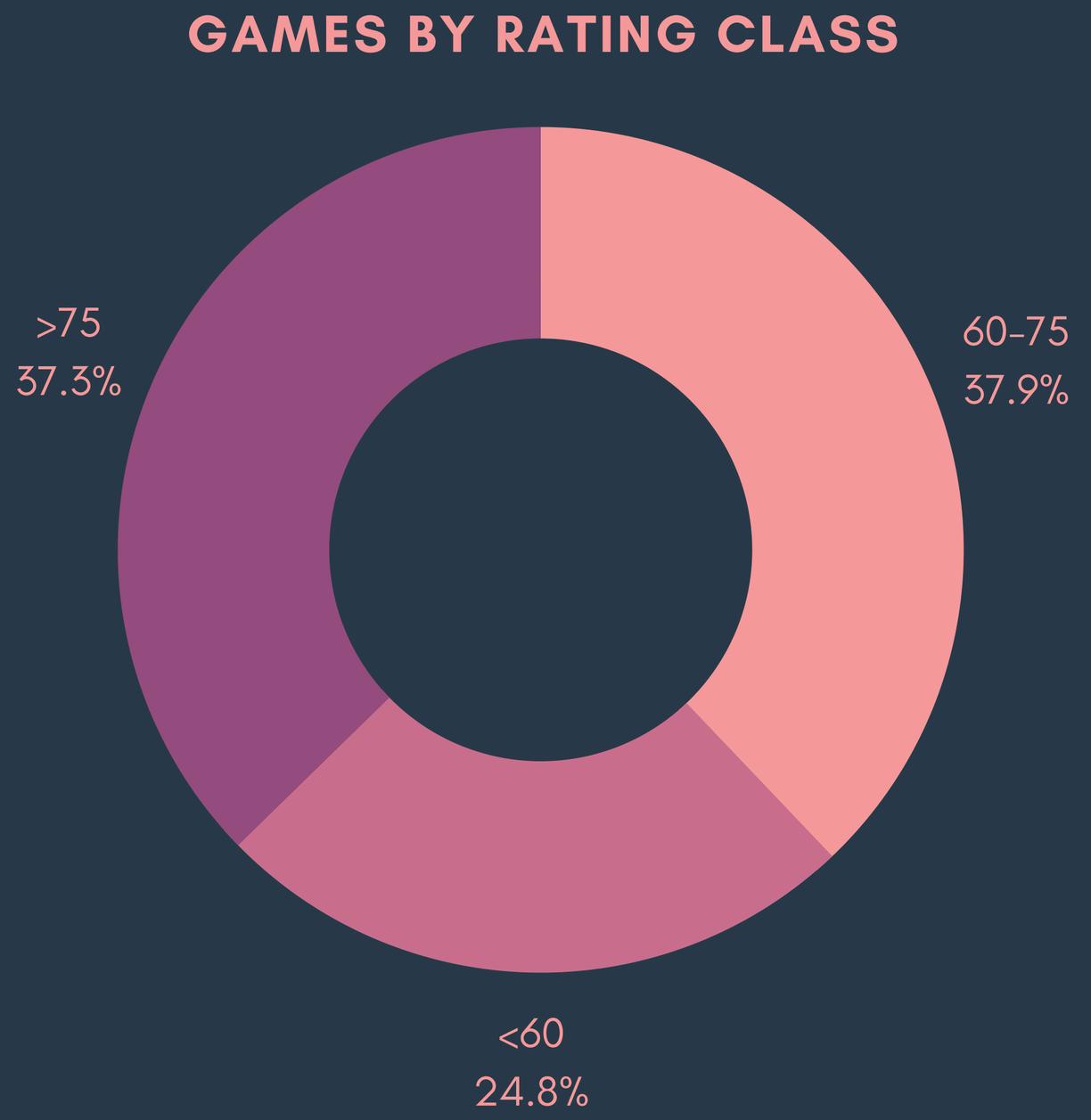
## WHO CARES?

You care!

Higher critic scores will raise your global sales potential

# MAKING CLASSES

Turn this problem into a classification by binning the review scores into three classes of success



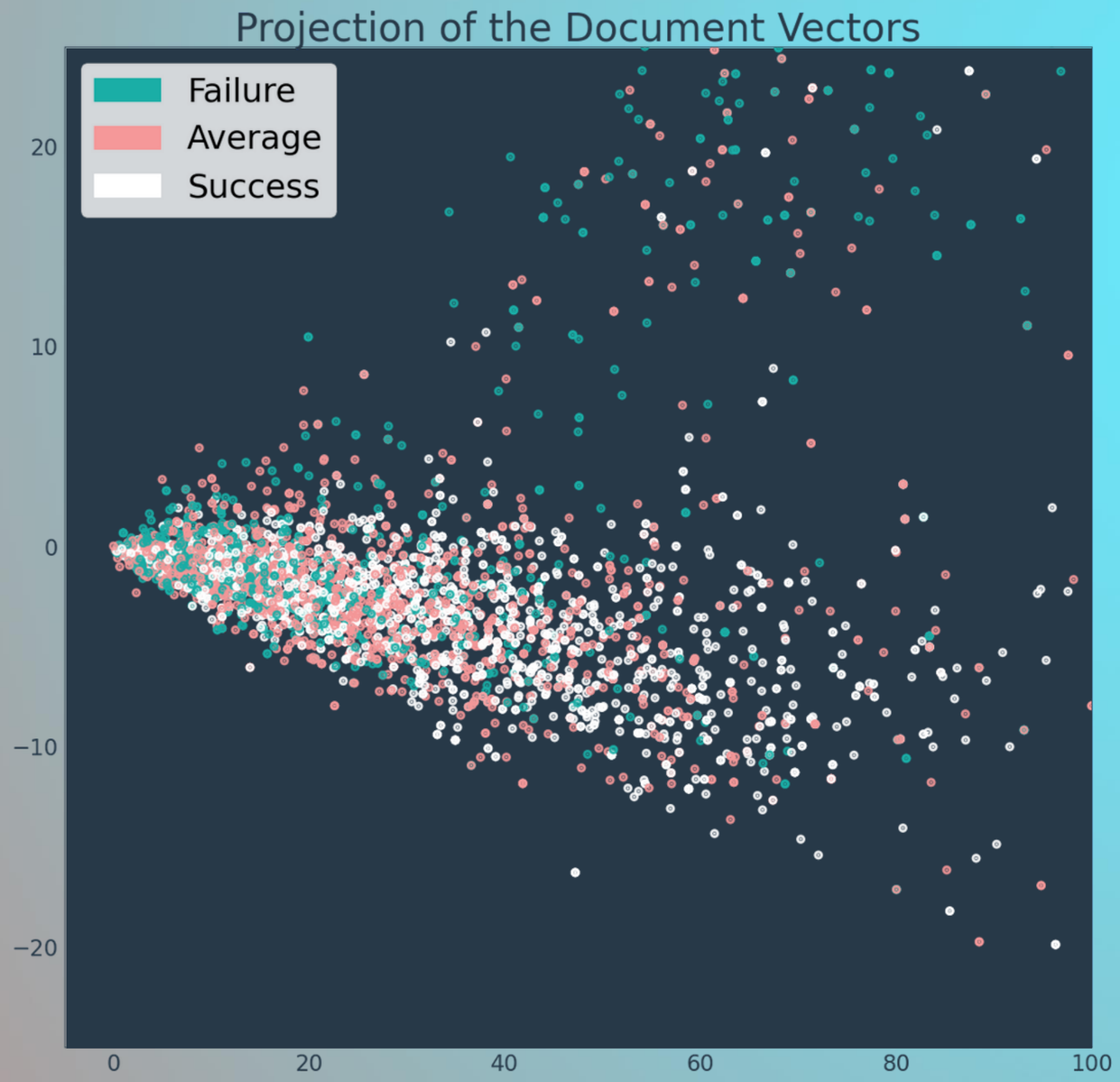
# Text Processing

## LEMMATIZATION

Reducing words to their roots

## VECTORIZATION

Turning the game descriptions into numerical data



# MODELING

THE GOOD STUFF

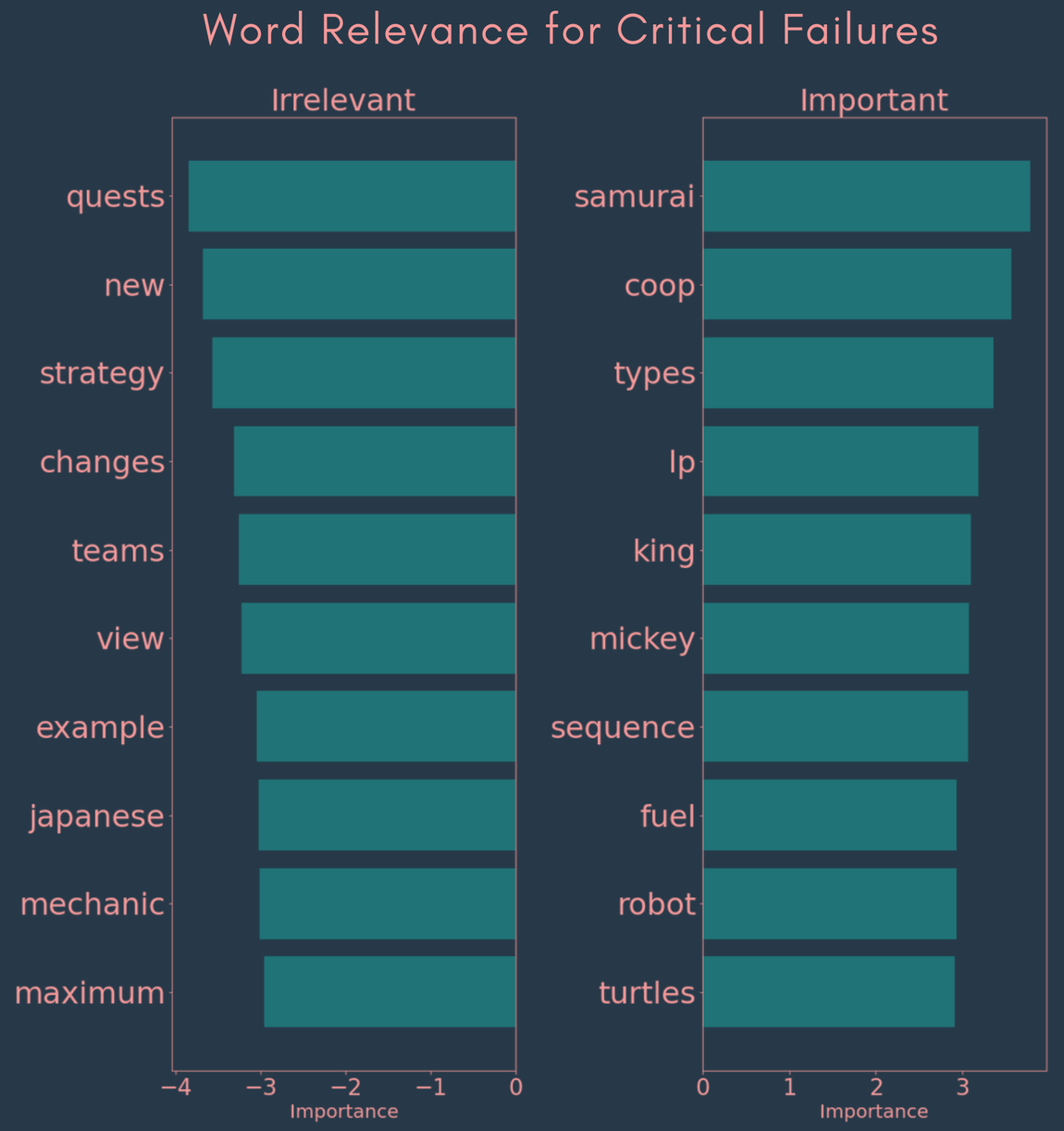
# THE MODEL SO FAR

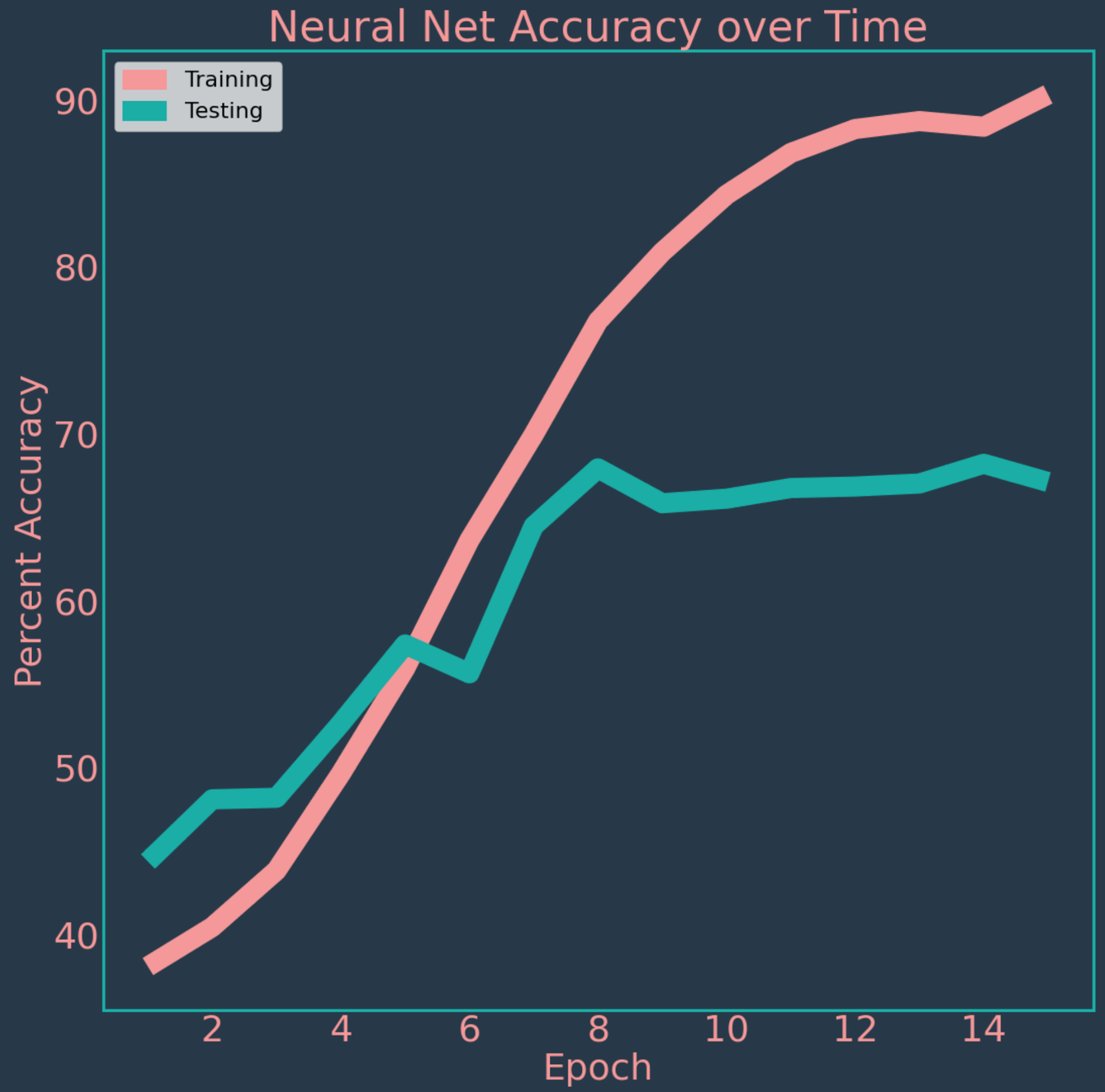
- Random Forest Classifier

- Balanced class weight

- Showing high variance

66% accuracy






# EMPLOYING DEEP LEARNING

## NEURAL NETWORKS CAN HELP

- Convolutional Neural Network

- Wikipedia2Vec embeddings

- Still shows high variance

70% accuracy

# FUTURE WORK

## FEATURE ENGINEERING

-Better text preprocessing

-More advanced word embeddings

## MORE POWER

-Further investigate NNs for NLP

-Utilize cloud computing

## DEPLOYMENT

-Develop a web application

-Design recommender system

# Contact Info

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