

# Anime Statistics and Analysis Platform (ASAP)

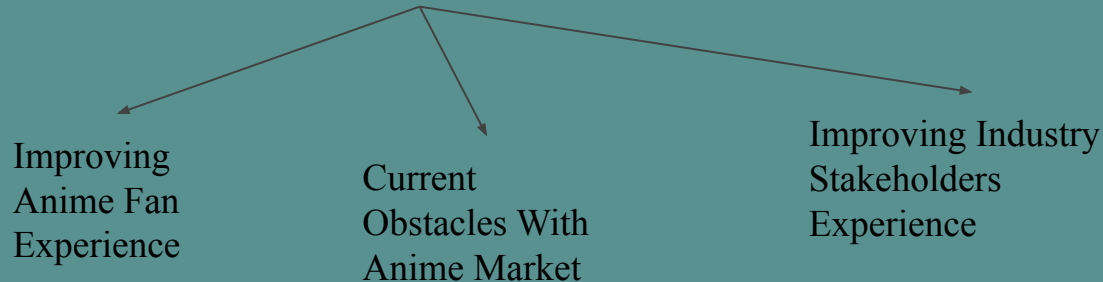
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From Subculture to Mainstream:

Examining Anime's  
Transformation From  
Microculture Into Global  
Mainstream Through User  
Engagements

The anime culture has become a global phenomenon that significantly influences popular culture and shapes the entertainment industry worldwide with skyrocketed revenues and unprecedented international growth in recent years.

This research exams the key factors of anime's global market expansion through "anime content creations and distributions" and analyze their implications for stakeholders and investors as well as regular anime fans.





# Data Preprocessing

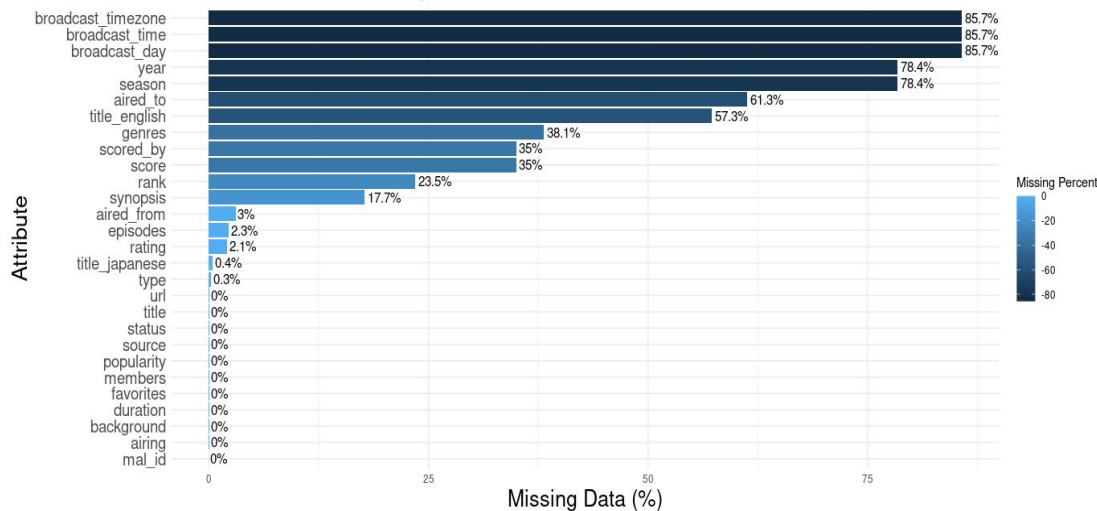
## Handling Missing Values

- NA rows were removed
- A lot of data

## Predictive Model Data Preprocessing

- Producer: split individual, criteria
- Studios: criteria
- Type: ANOVA, Tukey Test, criteria
- Genres: encodes top 10 with one hot encoding
- Ratings: ANOVA, Tukey Test, criteria

Percent Missing of each Attribute in Jikan Anime Data





# Predictive Model

Training, Validation, and Testing Set



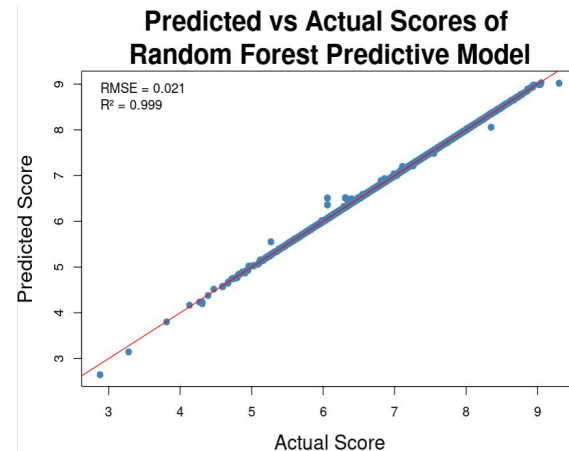
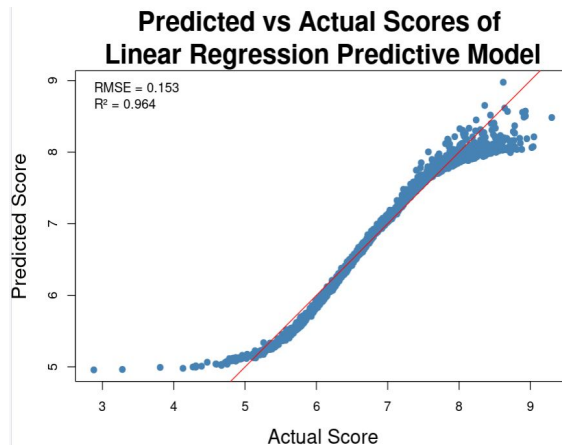
10-fold Cross Validation

## Linear Regression Model

- Linearly predicts the score based giving different weights to predictors
- Shows a sigmoid shape when plotting

## Random Forest

- Multiple decision tree contribute to the model
- Almost perfect alignment





# Future Plans



As the global anime market continues its expansion, our proposed platform offers various benefits to both anime fans and stakeholders. However, as entertainment technology and consumer behavior rapidly evolves, we hope to extend our research to improve the user experience and address specific limitations in our current platform.

- Large Language Model Integrations And Machine Learning Algorithms
- Multimedia Performance Evaluation
- User Contributed Database
- Global Expansion And Creator Support
- Live Event Integration And Virtual Conventions



# Set Ups

## Running Our Application Locally:

Clone the repository located at <https://github.com/illinois-stat447/sp25-prj-qiranhu2-wanjing4>. With the app.R file still open in RStudio, locate and click the run app button. It is a green triangle icon at the top of the source editor panel.

## Using Online Version:

If you prefer not to install anything, you can access the Anime Statistics and Analysis Platform directly through your web browser by clicking the following link.

<https://qiranhu.shinyapps.io/AnimeStatisticsandAnalysisPlatform/>