# MUSIC RECOMMENDATION SYSTEM BASED ON ACOUSTIC FEATURES

Qi Ren Haowei Huang

#### **ASSIGNMENT OF DUTIES**

Haowei Huang: Clustering methods, evaluation implementation, analysis and report

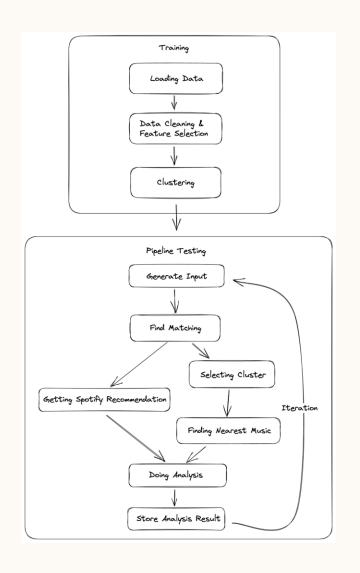
Qi Ren: System design & development, pipeline implementation, graphs and presentation

### INTRODUCTION

- Background
- Project Summary
- Related Method
- What's Interesting
- Problem Description

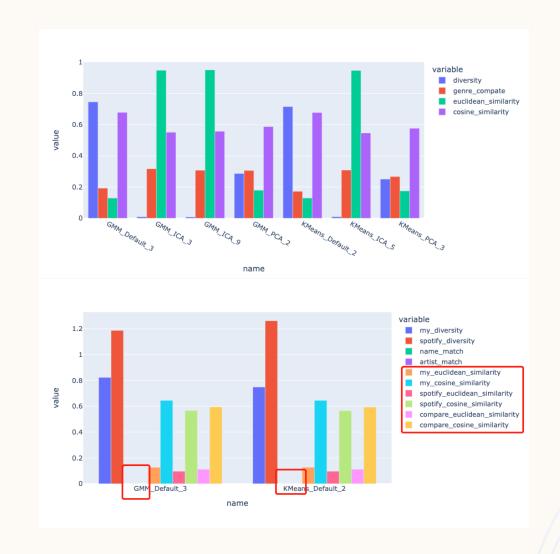
#### **METHODOLOGY**

- Clustering
  - KMeans & GMM
  - PCA & ICA
- Finding Nearest Music
  - Cosine, Euclidean & Manhattan
- Making Recommendations
- Performance Evaluation
  - Genre Comparison
  - Diversity & Similarity
  - Spotify Recommendation Comparison



#### **EXPERIMENTS**

- Pipeline Design
  - Automatically applying different datasets, methods and algorithms
- Data Output
  - Store data into csv files for further analysis
- Analysis
  - Diversity
  - Similarity
  - Genre Comparison



# **CONCLUSION & FUTURE WORKS**

- What we have achieved
  - Model Design
  - Model Evaluation
- What to do next
  - Model Optimization
  - New Methodology (Weight)

## **THANK YOU!**

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feel free to contact us if you would like to send us coop offers:)