



BEHIND TOP SPOTIFY SONGS IN INDONESIA

FINAL PROJECT
ID 24.05.2025

PRESENTED BY
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(1) INTODUCTION

SELF OVERVIEW

(2) PROJECT OVERVIEW

DESKRIPSI UMUM
PROJECT

(3) DATA EXPLORATION

DATA
UNDERSTANDING,
CLEANING, DAN
MANIPULATION

(4) MACHINE LEARNING

PEMBANGUNAN
MODEL MACHINE
LEARNING

(5) RESULTS

KESIMPULAN DAN
REKOMENDASI

(6) BONUSTRACK

PLAYLIST SESUAI FITUR
YANG PALING
BERPENGARUH

INTRODUCTION

ILHAM RINALDI

WORK:

- BUSINESS EFFECTIVENESS - TELKOMSIGMA (2025 - CURRENT)
- UPSTREAM OPERATION (BPI) - ELEVARM (2022 - 2025)
- BUSINESS DEVELOPMENT - NEURAFARM (2021- 2022)
- RISK MANAGEMENT - PERUM JASA TIRTA II (2020 - 2021)

EDU:

- DATA SCIENCE - DIBIMBING (2024 - 2025)
- BUSINESS MANAGEMENT - ITS (2017 - 2021)



SELF OVERVIEW
WORKING
EDUCATION



PROJECT OVERVIEW

BEHIND TOP SPOTIFY SONGS IN INDONESIA

Hal apa saja yang menjadi karakteristik Top Spotify Songs di Indonesia?

FITUR

SPEECHINESS

ACOUSTICNESS

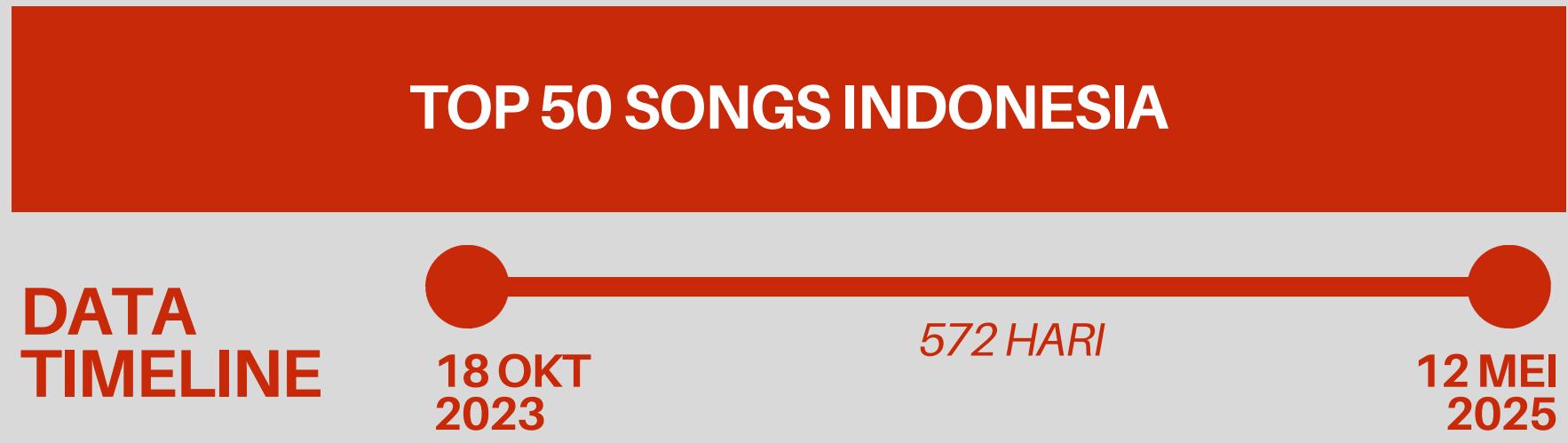
LOUDNESS

TEMPO

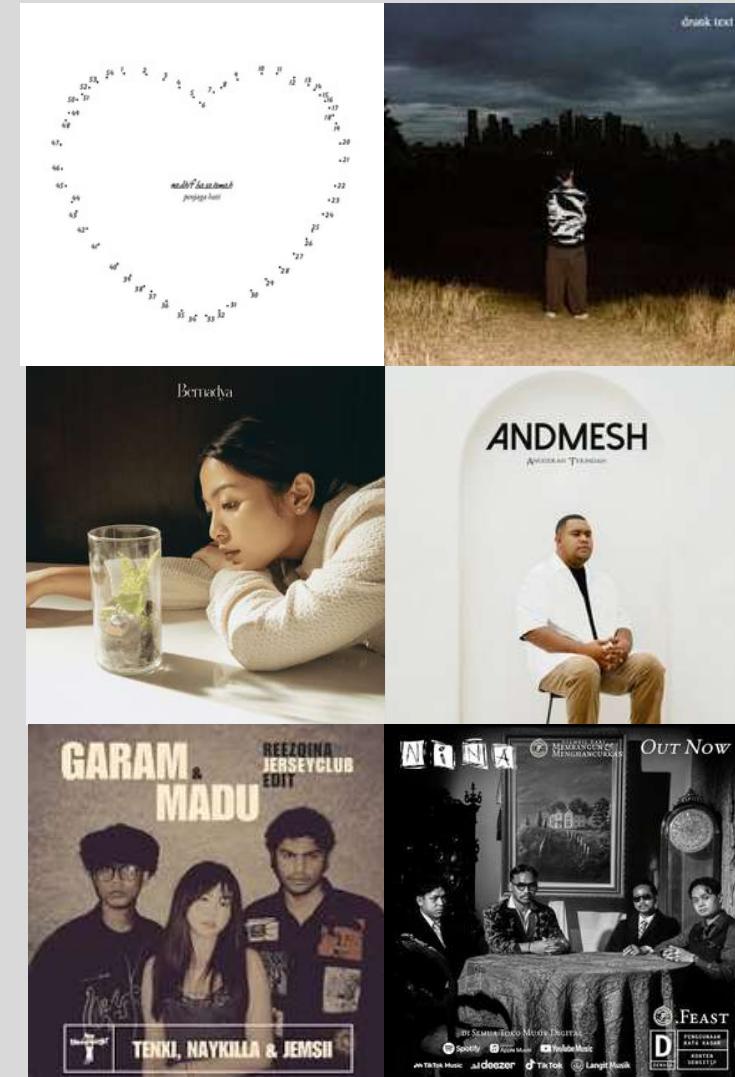
VALENCE

DATA EXPLORATION

DATASETS



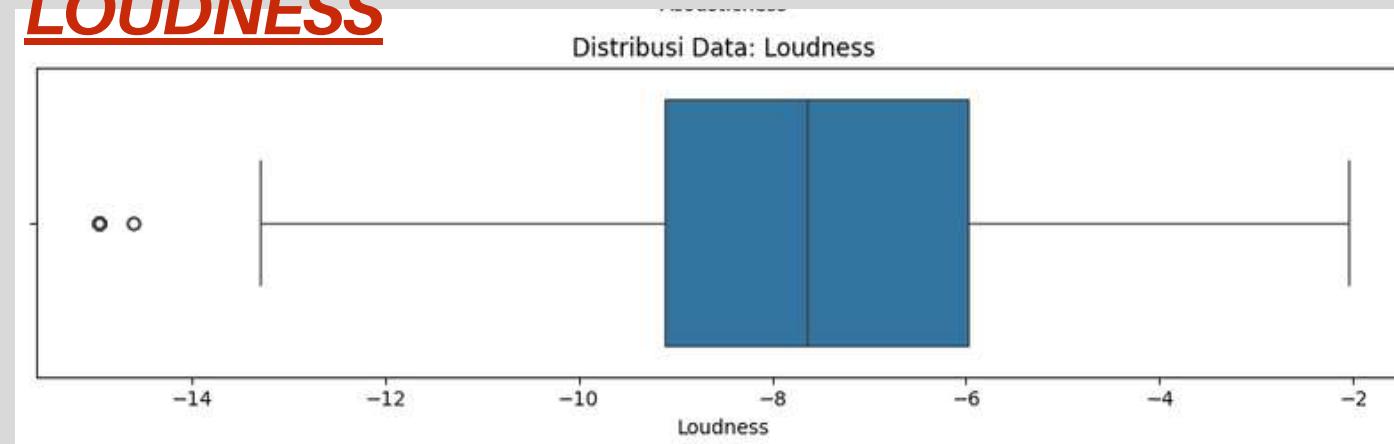
27.650 DATA ENTRIES **14** KOLOM **217** LAGU **156** PENYANYI



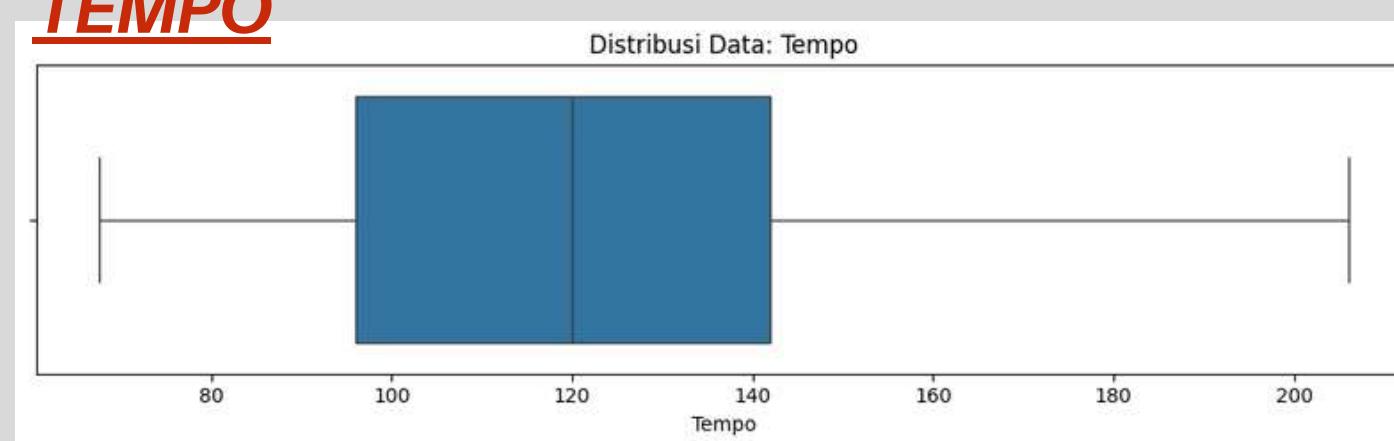
EXPLORATION DATA ANALYST

DISTRIBUSI DATA

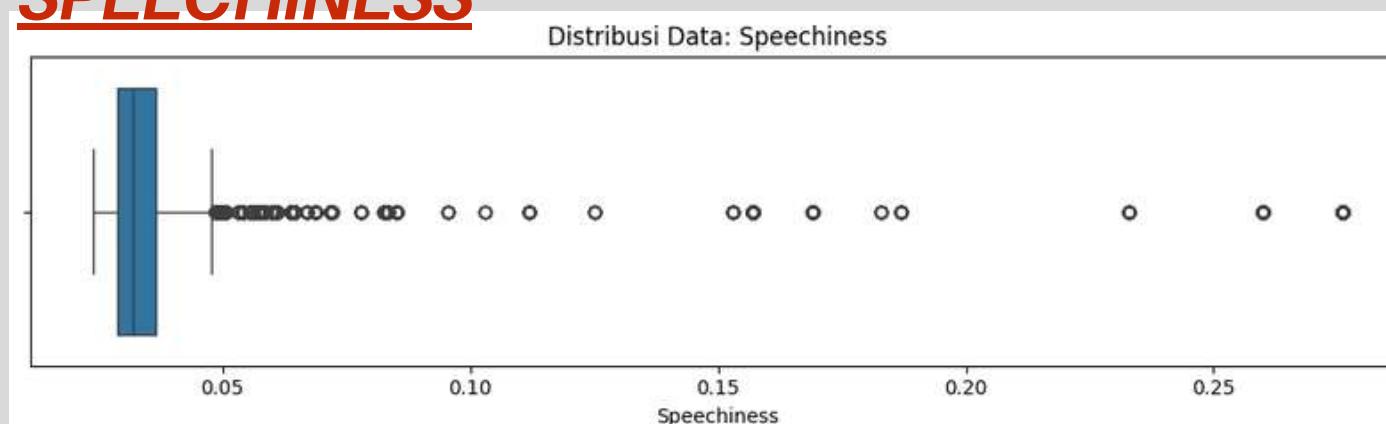
LOUDNESS



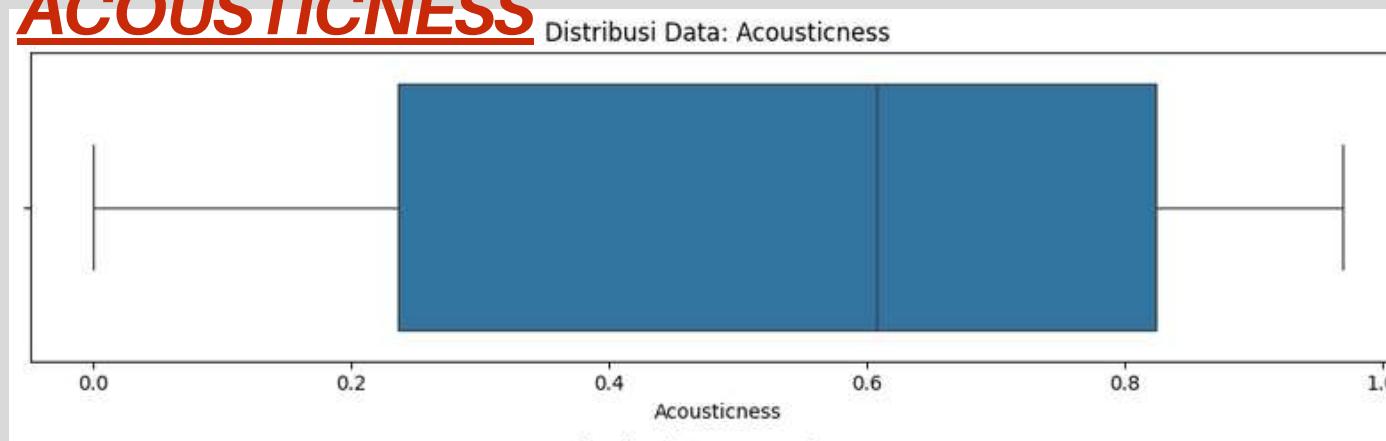
TEMPO



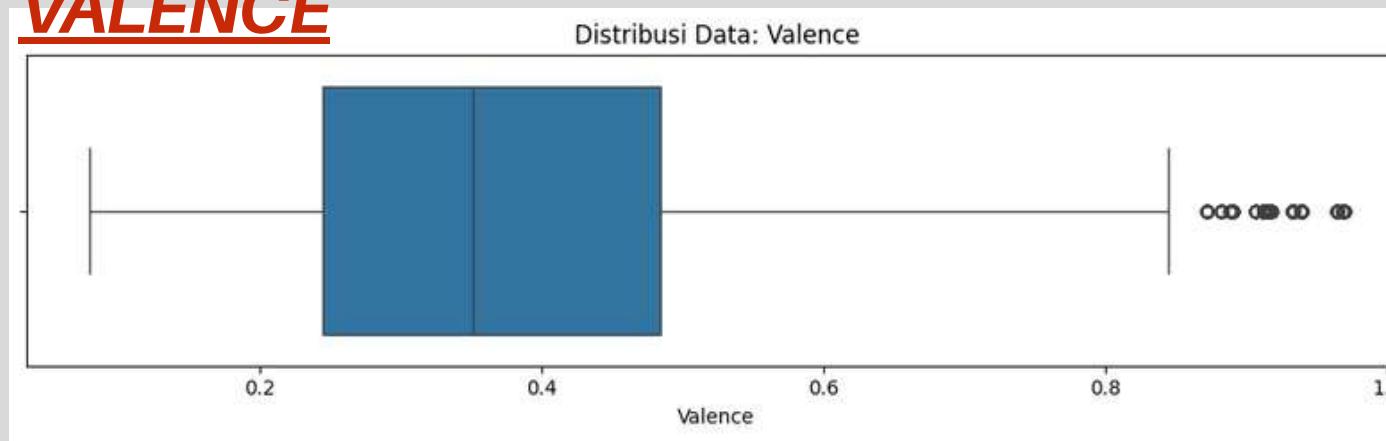
SPEECHINESS



ACOUSTICNESS

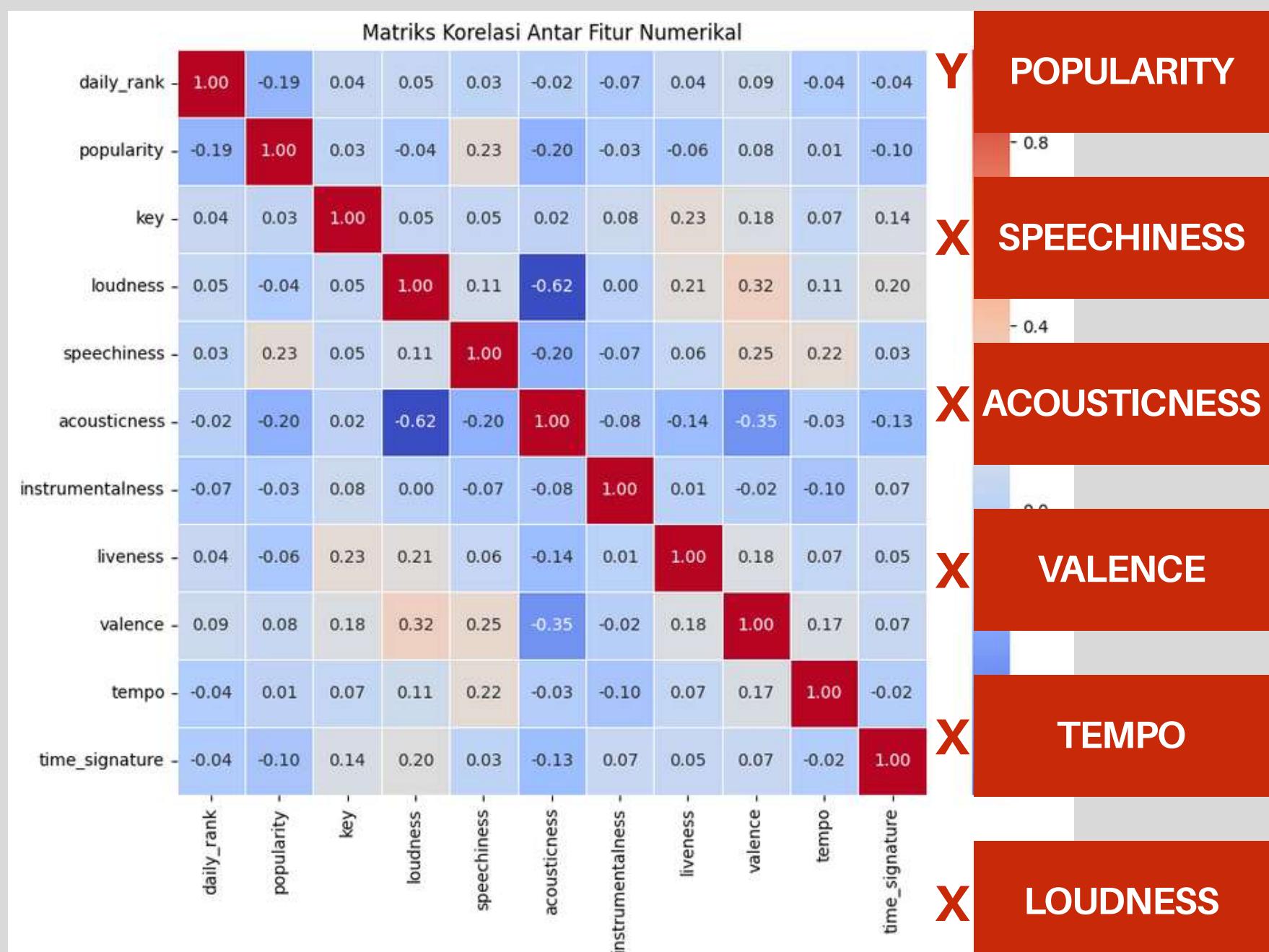


VALENCE



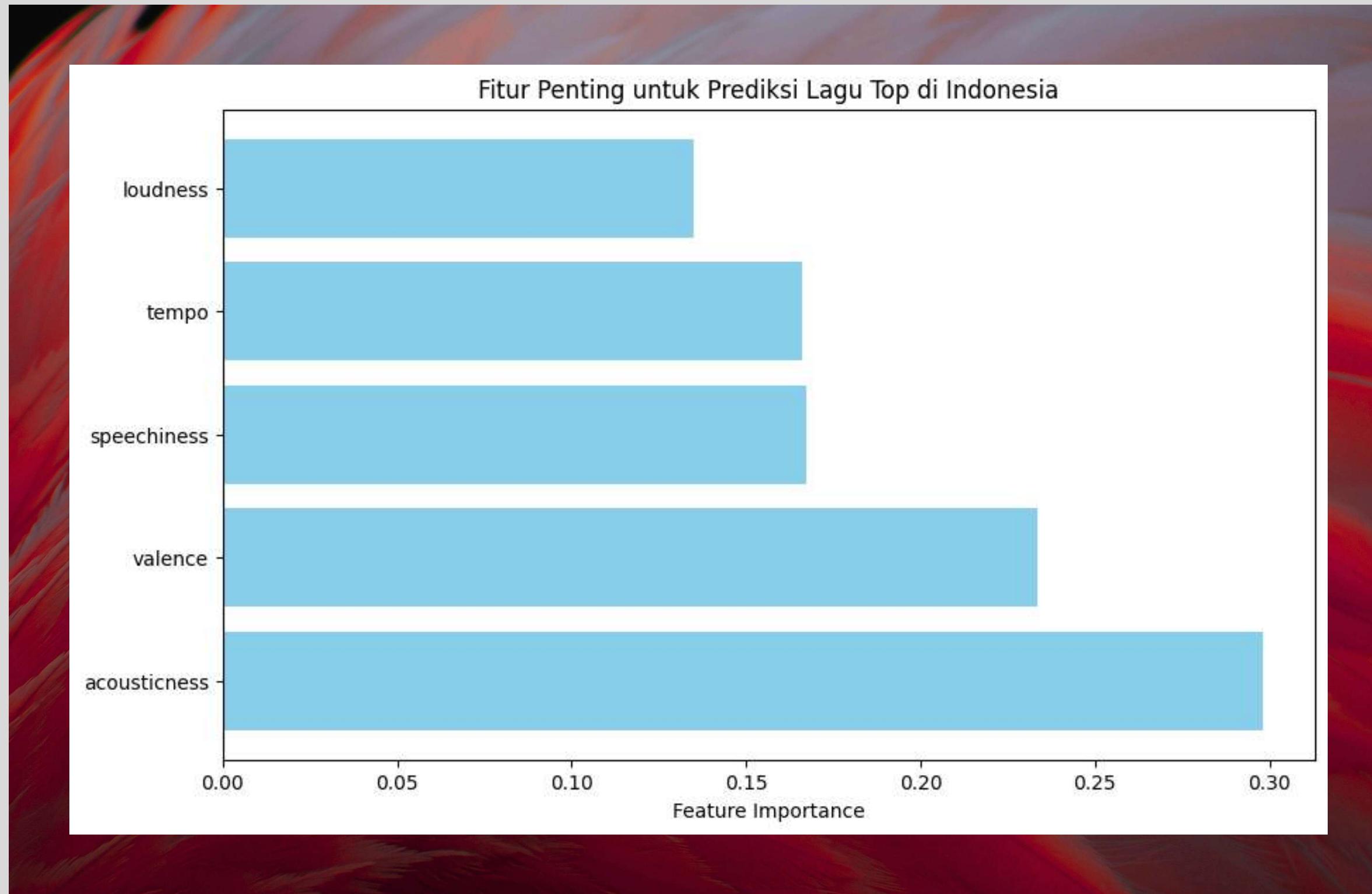
Data tidak dilakukan drop khususnya melihat outlier pada speechiness dan valence dikarenakan outlier tersebut secara visual masih dapat diterima dan diharapkan akan lebih insightfull apabila ikut disertakan dalam pengembangan model machine learning.

MACHINE LEARNING EVALUASI MODEL



| TEST | MAE | MSE | R ² |
|-------------------|------|-------|----------------|
| LINEAR REGRESSION | 4.85 | 52.94 | 0.11 |
| XG-BOOST | 2.40 | 22.88 | 0.61 |
| SVR | 3.33 | 35.32 | 0.41 |
| TRAIN | MAE | MSE | R ² |
| LINEAR REGRESSION | 4.77 | 47.44 | 0.11 |
| XG-BOOST | 2.23 | 14.16 | 0.73 |
| SVR | 3.23 | 30.02 | 0.44 |

MACHINE LEARNING RESULT



Lagu yang memiliki karakteristik dengan nilai acousticness yang tinggi diprediksi lebih diterima oleh telinga pendengar Indonesia. Selain itu, dapat dikombinasikan dengan valence yang lebih positif.



BONUSTRACK

The image shows two Spotify playlists side-by-side against a dark background with a subtle grid pattern.

Top 15 Valence

- Preview Ilham 🎵
- Save on Spotify

| Rank | Song | Artist | Length |
|------|---------------|----------------|--------|
| 1 | PICA PICA | Juan Reza | 03:24 |
| 2 | DOLA | ANGGA DERMAWAN | 03:50 |
| 3 | Separuh Nafas | Dewa 19 | 03:42 |

Top 15 Acousticness

- Preview Ilham 🎵
- Save on Spotify

| Rank | Song | Artist | Length |
|------|---------------------|--------------|--------|
| 1 | The Night We Met | Lord Huron | 03:28 |
| 2 | Semua Aku Dirayakan | Nadin Amizah | 05:10 |
| 3 | Resah Jadi Luka | Daun Jatuh | 04:50 |

Referensi: <https://www.kaggle.com/datasets/asaniczka/top-spotify-songs-in-73-countries-daily-updated>

TERIMAKASIH

EVALUASI DANSARAN

- | | | | |
|------------------------------------|--|------------------------------------|---|
| DATA MASIH MENGALAMI OVERTFITTING | KURANGI FITUR YANG DIGUNAKAN | USER DAPAT HANDSON LANGSUNG | INTERACTIVE DATA VISUAL STREAMLIT |
| HANDLING DATA OUTLIER SEBAGAI OPSI | MENGHAPUS DATA OUTLIER | MEMBUAT VERSI REGION LAINNYA | BISA DIBUAT VERSI USA, SEA, DAN LAINNYA |
| MELAKUKAN FILTER LANJUTAN | PILIH TOP 50 YANG BERTAHAN SELAMA WAKTU TERTENTU | PREDIKSI POTENSI LAGU MASUK TOP 50 | DAPAT MENGGUNAKAN LAGU RILISAN BARU SEBAGAI DATA BARU |

