

|  |
| --- |
| GENDER SPEECH RECOGNITION  REPORT |
|  |
| 8 maggio  SXXXXXX: Atanasio Giuseppe  S296138: Carachino Alessio |



Sommario

[Premises 3](#_Toc102902566)

[Task 3](#_Toc102902567)

[Dataset 3](#_Toc102902568)

[Dimenstionality Reduction Techniques 4](#_Toc102902569)

[PCA 4](#_Toc102902570)

[LDA 4](#_Toc102902571)

[Classification 5](#_Toc102902572)

[What we use… 5](#_Toc102902573)

[Expectations 5](#_Toc102902574)

[Results 5](#_Toc102902575)

[Summary and Considerations 5](#_Toc102902576)

[Validation 6](#_Toc102902577)

[K-Fold 6](#_Toc102902578)

[Leave-One-Out 6](#_Toc102902579)

[Holdout 6](#_Toc102902580)

Premises

# Task

The goal is to…

# Dataset

The dataset consists of synthetic speaker embeddings that represent the acoustic characteristics of a spoken utterance. Each row corresponds to a different speaker, and contains 12 features followed by the gender label (1 for female, 0 for male). The features do not have any particular interpretation. Speakers belong to four different age groups. The age information, however, is not available.

The training set consists of 3000 samples per class, whereas the test set contains 2000 samples per class.

Dimensionality Reduction Techniques

# PCA

Text text

….

….

# LDA

Text text …

Classification

# What we use…

Text text

# Expectation

Since this is the …, this should be the best for our goal..

# Results

Tables with results and combinations with pca and lda

# Summary and Considerations

Text Text

Validation

# K-Fold

Text Text

# Leave-One-Out

Text Text

# Holdout

Text Text