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# BSc FYP - Emotion Classification in Children's Speech

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# Chapter 1

## Introduction

### 1.1 Info

Emotion recognition from speech is important with tasks involving Human-Machine interaction in the same way it is important to Human-Human interaction. The main issues in this field are related to the search for highly discriminate features and appropriate classification methods.

### 1.2 Objective

Conduct an appropriate literature review regarding relevant topics, primarily Emotion Recognition and Speech Signal Processing, that use more recent techniques, such as GMM-UBMs and Deep Neural Networks.

Apply signal processing techniques to Emotional Speech Data commonly used in Speaker Identity Verification

Used a DNN classifier to obtain a baseline performance for such techniques.

# Chapter 2

## Literature Review

### 2.1 Overview

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### 2.2 What is Emotion?

#### 2.2.1 Definition

#### 2.2.2 Classifying Emotion

#### 2.2.3 Automatic Emotion Recognition

### 2.3 Speech Technologies

#### 2.3.1 Areas and the like

### 2.4 Emotion Recognition from Speech

#### 2.4.1 Corpora

#### 2.4.2 Feature Selection

Paralinguistic Features

IVectors

#### 2.4.3 Classifiers

Machine Learning

Neural Networks

### 2.5 Recent Work

# Chapter 3

## Methods

# Chapter 4

## Results

# Chapter 5

## Conclusion

# Chapter 6

## Bibliography



# Chapter 7

## Appendix