

# Pattern Recognition and Machine Learning Course Project

Group 17

## Introduction

With Increasing advancement in cameras the amount of pictures collection is increasing day by day. Pictures ranges from selfies to group photos. Thus it is common to have an model that idetifies a person from the image. Facial Recogination has its applications ranging from social networking websites, attendance system, Surveillance, military application

## 1 Background

Facial Recogination involves:

- **Face Detection:** Locate and identify the presence and location of faces in the input data.
- **Face Alignment:** Normalize the face's position, orientation, and size to ensure consistent positioning of facial features.
- **Feature Extraction:** Capture and represent the unique characteristics or features of a face, such as facial landmarks.
- **Recognition and Identification:** The model identifies the individual and labels the image according to the dataset it was trained on.

## 2 Feature Extraction

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**3 Results**

**4 Conclusion**