

# 6.867 Final Project Writeup

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## Abstract

In this project, we compared different methods for facial expression recognition.

## 1 Introduction

### 1.1 PCA

### 1.2 Facial Landmark Detection

### 1.3 Convolutional Networks

## 2 Experimental Details

The dataset we used was taken from a Kaggle facial expression dataset.

## 3 Results and Analysis

## References

- [1] Lawrence, S.; Giles, L.; Tsoi, A. C.; Back, A. D. (1997) “Face Recognition: A Convolutional Neural-Network Approach” *Neural Networks, IEEE transactions on* 8 (1):98-113
- [2] Matsugu, M.; Mori, K.; Mitari Y.; Kaneda Y. (2003) “Subject independent facial expression recognition with robust face detection using a convolutional neural network” *Neural Networks* 16 (5):555-559