

Mohammad Ali Jinnah University

Chartered by Government of Sindh - Recognized by HEC

**Lab Project Proposal**

**Project title:** Face Recognition & Attendance

**Subject:** Data Structures and Algorithms Lab (CS 2511)

**Section:** AM

**Teacher:** MUHAMMAD MUBASHIR KHAN

**Date:** Tuesday, November 10, 2020

**Team Member Details:**

1. Muhammad Fahad (FA19-BSSE-0014).
2. Jaffar Abbas (FA19-BSSE-0008).
3. Ahmed Amin (FA19-BSSE-0063).

**Project title:** Face Recognition & Attendance System (FAJ).

**Details:**

It is a Smart Computer Vision Application with various functionalities. I have tried to put as many Machine Learning tools as possible into one single Application for greater productivity.

**KEY FEATURES**

1. Auto Attendance system Using Face Recognition techniques.
2. Face Trainer
3. Motion Detection
4. OCR (Optical Character Reader)
5. Gesture Control(Controlling Mouse Pointer Using Finger or Red Colored Object)
6. Rectangle Shape Detection
7. Trained Faces Image Gallery View
8. Eye Detection
9. Persistent Storage for Trained Faces Image Using Database.

**TECHNOLOGY USED**

1. Core Java
2. JavaCV (wrapper of Opencv)
3. JavaFX
4. MySQL
5. Maven
6. Tesseract OCR Framework