

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 Opency)
- 3. JavaFX
- 4. MySQL
- 5. Mayen
- **6.** Tesseract OCR Framework