

# Face Recognition in Low Light

## Software Design Documentation

### 1. Software Description

This is a software to recognize the face of a specific person, which is known. The software should work in normal light condition and low light condition.

The main goal of the software is detecting and recognizing the face of the known person in real-time, taking input as RGB images from camera feed. Images of known person's face are provided in advance.

When the camera feed is in low light condition, image processing techniques should be used to brighten the image in order to detect and recognize the known person's face correctly.

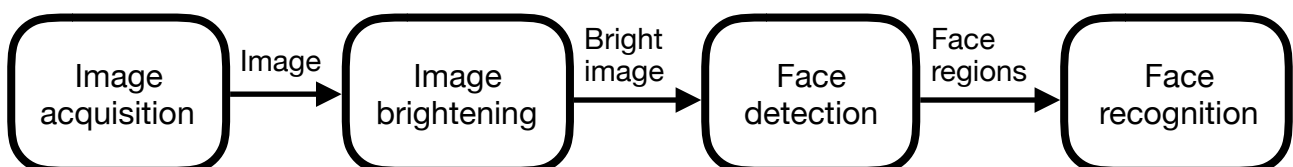
If the known person's face is recognized, there should be visualization output of the region of the known person's face.

### 2. Input and Output

Input: camera feed

Output: visualization of the recognized face

### 3. Face Recognition Flow Chart



### 4. Face Recognition Class Diagram

