

LabVIEW based intelligent frontal & non-frontal face recognition system

Abstract

Face identification and tracking has taken a significant role in this modern technology. It had been widely used in security systems, intelligent robotics, mug shot and crowd surveillance. Face identification is a difficult task to be achieved as the position and orientation of the face will greatly impact the recognition and detection. In addition to that, changes in a person's appearance can lead to difficulties in identifying who the person is. To circumvent this problem, a system is designed to identify and track a person in a pre-defined range for frontal and non-frontal image. In this paper, the focus is laid on the face recognition to identify a person using Neural Network using LabVIEW as the whole system software. The designed system in LABVIEW has been tested real-time which gives a high accuracy for recognition. Network has been trained based on the available database and LABVIEW software is responsible for the whole architecture.