

## Face Recognition Based Door Monitoring System

A. Daptardar<sup>1</sup>, S. G. Gollagi<sup>2</sup>, Prachi Ratnappagol<sup>3</sup>, Veeresh Tukkanavar<sup>4</sup>, Jyoti Patil<sup>5</sup>, Rahul Yarandoli<sup>6</sup>

<sup>1,2</sup>Assistant Professor, <sup>3,4,5,6</sup> Students

Department of Computer Science and Engineering,  
Hirasugar Institute of Technology, Nidasoshi, Karnataka, India,

### Abstract

In recent years, with the demand for better security, computers have played a large role. Due to their precision, large memory banks and high computing power, considerable development has been made in the area of face recognition. Computers now surpass humans in many face recognition tasks. A human being can remember limited number of faces. But a computer doesn't have any limits, and can hence be used where large databases of facial records are needed. Such a facial recognition system has many potential applications including crowd and airport surveillance, private security and improved human-computer interaction. Such a system is perfectly suited to fix security issues and offer flexibility to smart house control.

This project is aimed to be a complete system for face recognition: easy to build, cheap cost and effective. Main purpose is to be set as an alert for home visitors and provide information about the visitors in a dynamic website and phone application. It can also be used in other fields like industries, offices and even air-ports for identifying wanted people. Among the other bio-metric techniques, face recognition method offers one great advantage which is user friendliness.

**Keywords:** Internet of things (IoT), raspberry pi (RPI), Internet, Pi camera, android app, visitor alert.

\* Corresponding author

Email address: arunadaptardar.cse@hsit.ac.in