SMART SECURITY SYSTEM USING IMAGE RECOGNITION
A Industrial/Practical Training project report

Submitted to the Faculty of Engineering of
**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA,
KAKINADA**

In partial fulfillment of the requirements for the award of the Degree of

BACHELOR OF TECHNOLOGY
In
COMPUTER SCIENCE AND ENGINEERING

By

A.SOWMYA PRIYA   **CH.REVATHI**
(16481A0509)   **(16481A0531)**

B.SUSHMA PARVATHI   **V.RAJESH**
 **(16481A0521)**   **(17485A0507)**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GUDLAVALLERUENGINEERINGCOLLEGE
(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)
SESHADRIRAOKNOWLEDGEVILLAGE
GUDLAVALLERU – 521356
ANDHRA PRADESH
2019-2020

GUDLAVALLERU ENGINEERING COLLEGE
(An Autonomous Institute with Permanent affiliation to JNTUK, Kakinada)

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DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING
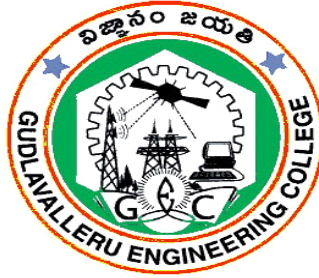
<u>CERTIFICATE</u>

This is to certify that the Industrial/Practical Training project Report entitled **"SMART SECURITY SYSTEM USING IMAGE RECOGNITION"** is a bonafide record of work carried out by **A.SOWMYA PRIYA, CH.REVATHI, B.SUSHMA PARVATHI, V.RAJESH** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in **Computer Science and Engineering of Jawaharlal Nehru Technological University Kakinada**, **Kakinada** during the academic year 2019-2020.

SK.SALMA BEGUM

(Industrial/Practical Training Coordinator)

INTERNSHIP REPORT APPROVAL FORM

May 24, 2019

With immense pleasure, this is to approve that the students of Gudlavalleru Engineering College i.e,

SOWMYA PRIYA ANUMOLU(16481A0509),
REVATHI CHELLI(16481A0531),
SUSHMA PARVATHI BHADDIRAJU(16481A0521) and
RAJESH VATTIPROLU(17485A0507)

successfully completed their Project and Project Report on **"SMART SECURITY SYSTEM USING IMAGE RECOGNITION"** under our guidance.

We are highly impressed with the work that they have done and commend them on their quick grasping skills. They have shown good intent to learn and have put the knowledge gained into application in the from of this project. We appreciate the hard work and commitment shown by them.

We, hereby approve that this document is completely checked and accepted by SmartBridge Technical Team. It's been an absolute pleasure to educate and mentor these students. We hope that this document will also serve as a Letter of Recommendation, to whomsover applied.

We wish them success in all future endeavors and a great career ahead.

Akshay kumar Kothuri
AI and IOT Developer

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The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of people who made it possible and whose constant guidance and encouragements crown all the efforts with success.

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Team members
A.SOWMYA PRIYA (16481A0509)
CH.REVATHI (16481A0531)
B.SUSHMA PARVATHI(16481A0521)
V.RAJESH(17485A0507)

ABSTRACT

Safety has, for a long time, been one big thing everyone is concerned about. Security breach of private locations has become a threat that everyone intends to eliminate. The traditional security systems trigger alarms when they detect a security breach. However, the usage of image processing coupled with deep learning using convolutional neural networks for image identification and classification helps in identifying a breach in an enhanced fashion thereby increasing security furthermore to a great extent. This is due to its capability to extract complex features from the images using accurate and advanced face and body detection algorithms. The rate at which machine learning, especially deep learning, is transitioning is very high. The use of such technology in taking the existing systems and models to the next level would be a great step towards advancements in every field of science and technology. The same goes with computer vision. These two coupled and brought together to be used in the field of security results in achieving a lot more than what is imagined to be possible and this paper aims to do the same.

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