Project

ON

"IMAGE ANALITIC FOR CLASSIFYING DATA SETS FOR LARGE CLASS"

IS SUBMITTED TO

SANT GADGE BABA AMRAVATI UNIVERSITY

IN THE PARTIAL FULFILLMENT OF THE DEGREE OF

BACHELORS OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

BY

Mr. Pranav R. Mundre   **Mr. Pratik N. Dangore**

Mr. Vishal G. Inzalkar   **Mr. Aditya D. Sontakke**

Mr. Kartik Kalpande   **Mr. Nikhil V. Rathod**

GUIDED BY

Prof. A. A. Bardekar

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
(ACCREDITED BY NBA)

SIPNA COLLEGE OF ENGINEERING AND TECHNOLOGY AMRAVATI
(AN ISO 9001:20015 CERTIFIED INSTITUTE)

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
2018-2019

Sipna College of Engineering & Technology, Amravati

Department of Information Technology

CERTIFICATE

This is to certify that **Mr. Pranav R. Mundre, Mr. Pratik N. Dangore, Mr. Vishal G. Inzalkar, Mr. Aditya D. Sontakke, Mr. Kartik N. Kalpande , Mr. Nikhi V. Rathod** has satisfactorily completed the project work towards the **Bachelor of Engineering** Degree of Sant Gadge Baba Amravati University, Amravati in **Computer Science & Engineering** discipline on the topic entitled **"Image Analitic For Classifying Data Sets For Large Class",** during the academic year 2018-19 under my supervision and guidance.

Date:

Place:

Prof. A. A. Bardekar   Dr. S. S. Dhande

   Guide   **Head of Department**

Dr. A. D. Gawande

Principal

PROJECT APPROVAL SHEET

Project Entitled

"IMAGE ANALITIC FOR CLASSIFYING DATA SETS FOR LARGE CLASS"

By

Mr. Pranav R. Mundre	**Mr. Pratik N. Dangore**
Mr. Vishal G. Inzalkar	**Mr. Aditya D. Sontakke**
Mr. Kartik Kalpande	**Mr. Nikhil V. Rathod**

is approved for the degree of

Bachelors of Engineering

In

Computer Science & Engineering

Of

Sant Gadge Baba Amravati University, Amravati.

Internal Examiner:　　　　　**External Examiner:**

Name:　　　　　　　　　　　**Name:**

Date:　　　　　　　　　　　　**Date:**

ACKNOWLEDGEMENT

A moment of pause, to express a deep gratitude to several individuals, without whom this project could not have been completed.

We feel immense pleasure to express deep sense of gratitude and indebtedness to our guide **Prof. A. A. Bardekar**, for constant encouragement and noble guidance.

We express our sincere thanks to **Dr. S. S. Dhande**, Head Of Department, Computer Science & Engineering, and the other staff members of the department for their kind co-operation.

We express our sincere thanks to **Dr. A. D. Gawande**, Principal, Sipna College of Engineering & Technology for his valuable guidance.

We also express our sincere thanks to the library staff members of the college.

Last but not the least we are thankful to our friends and our parents whose best wishes are always with us.

Name of students

Mr. Pranav R. Mundre

Mr. Pratik N. Dangore

Mr. Kartik N. Kalpande

Mr. Vishal G. Inzalkar

Mr. Nikhil V. Rathod

Mr. Aditya D. Sontakke

ABSTRACT

The aim of this work is to discuss a selection of the most popular image analysis techniques in the context of industrial inspection applications. We will explain the mechanics of each method and demonstrate their applicability (or lack of such applicability) in the industrial setting using real industrial images. The facial expression recognition system presented in this research work contributes a resilient face recognition model based on the mapping of behavioral characteristics with the physiological biometric characteristics. The physiological characteristics of the human face with relevance to various expressions such as happiness, sadness, fear, anger, surprise and disgust are associated with geometrical structures which restored as base matching template for the recognition system.

Various types of moments have been used to recognize image patterns in a number of applications. The author evaluates a number of moments and addresses some fundamental questions, such as image representation ability, noise sensitivity, and information redundancy. Moments considered include regular moments, Legendre moments, Zernike moments, pseudo-Zernike moments, rotational moments and complex moments. Properties of these moments are examined in detail, and the interrelationships among them are discussed. Both theoretical and experimental results are presented.

Keywords: Image analysis, Moment methods, Polynomials, Image recognition, Pattern recognition, Stochastic resonance, Image reconstruction, Application software, Image representation, Image sampling pattern recognition, picture processing

INDEX

LIST OF FIGURES

LIST OF SCREENSHOT