Savitribai Phule Pune University
A
PROJECT REPORT
ON
"_____"
(font size=12)
Submitted in partial fulfillment of the requirement for the award of the degree of
BACHELOR OF ENGINEERING
IN
ELECTRONICS & TELECOMMUNICATION ENGINEERING
By

(NAME OF THE STUDENT/S)
(College copy should contain all the group members name and student personal copy should contain individual student name)
Under the guidance of
Prof. _____

SANDIP
FOUNDATION

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING
SANDIP FOUNDATION'S
SANDIP INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE
Mahiravani, Trimbak Road, Nashik-422213
Academic Year: 2019-20

Certificate

This is to certify that, this Project report entitled- "-------------------------------------
------------------------" Submitted by **Mr./Miss.**----------------------------------- for partial fulfillment of the requirement for the award of the **Bachelor Of Engineering** in **Electronics & Telecommunication Engineering** as laid down by the **SAVITRIBAI PHULE PUNE UNIVERSITY**, Pune. This is a record of his/her own work carried out by him/her under my supervision and guidance during year 2019-20.

Place: - Nashik   Date: -

Exam Seat No.:

Prof._____   Dr. Mrs. G. M. Phade

GUIDE   **HEAD**
DEPARTMENT OF ELECTRONICS &   DEPARTMENT OF ELECTRONICS &
TELECOMMUNICATION   TELECOMMUNICATION

Prof. _____   Prof. Dr. S. T. Gandhe
                                          SITRC, Nashik

EXAMINER   **PRINCIPAL**

ACKNOWLEDGEMENT
(Sample Copy)

The work procedure in this report would not have been completed without the encouragement and support of many people who gave their precious time and encouragement throughout this period. We would like to sincerely thank our project guide **Prof. ----------------------** for his/her guidance and for the patience he/she showed us during the process of preparation of project from initial conception of final design and implementation. We would also like to extend our gratefulness to the Head of Department E and TC **Dr. Mrs. G. M. Phade.** Lab and library in charge for kindly granting us access to lab. We would also like to thank to the teaching and non-teaching staff who helped us from time to time with their own experience and also, we would like to express our gratitude to the core of our heart, principal **Dr. S.T. Gandhe** Sir for being supportive and always encouraging.

Name of student 1
Name of Student 2
Name of student 3

The project report should be in the following format:

Title of the project
Certificate
Acknowledgment
Abstract
Index/ Table of content
List of figures
List of tables
List of graphs
List of Appendices
Introduction
Literature survey
Methodology
System performance
Conclusion, Future scope, Advantages, Disadvantages and Applications
Appendix (If any)
References (IEEE format)
Data Sheets (If any)

Use Times New Roman font, JUSTIFIED.
Use font size
Title – 16
sub-title – 14
paragraph -12
Line spacing 1.5

ABSTRACT

Abstracts should be formatted as a single paragraph in a block format and with no paragraph indentations. In most cases, the abstract page immediately follows the title page. Do not number the page. Rules set forth in writing manual vary but, in general, you should center the word "Abstract" at the top of the page with double spacing between the heading and the abstract. The final sentences of an abstract concisely summarize your study's conclusions, implications, or applications to practice and, if appropriate, can be followed by a statement about the need for additional research revealed from the findings.

Use the active voice when possible, but note that much of your abstract may require passive sentence constructions. Regardless, write your abstract using concise, but complete, sentences. Get to the point quickly and **always use the past tense** because you are reporting on a study that has been completed.

The abstract SHOULD NOT contain:

- Lengthy background or contextual information,
- Redundant phrases, unnecessary adverbs and adjectives, and repetitive information;
- Acronyms or abbreviations,
- References to other literature [say something like, "current research shows that..." or "studies have indicated..."],
- Using ellipticals [i.e., ending with "..."] or incomplete sentences,
- terms that may be confusing to the reader,
- Citations to other works, and
- Any sort of image, illustration, figure, or table, or references to them.

(Sample copy of abstract)

Face recognition has been very important issue in computer vision and pattern recognition over the last several decades. One difficulty in face recognition is how to handle the variations in the expression, pose and illumination when only a limited number of training samples are available. In this project Principal Component Analysis (PCA) is proposed for facial expression detection. Initially the eigenspace was created with eigenvalues and eigenvectors. From this space, the eigenfaces are constructed, and the most relevant eigenfaces have been selected using Principal Component Analysis (PCA). With these eigenfaces the input test images are classified, based, on. Euclidian distance. The proposed method was carried out by taking the picture database. The database was obtained with 10 photographs of each person at different expressions. These expressions can be classified into some discrete classes like happy, anger, disgust, sad and neutral. Absence of any expression is the "neutral" expression. There are 30 persons in database. The database is kept in the train folder which contains each person having all his/her photograph. Another database was also prepared for testing phase by taking 5 photographs of 30 persons in different expressions and viewing angles but in similar conditions (such as lighting, background, distance from camera etc.). And these database images were stored in test folder.)

Table of Contents

Example of naming the chapter

Level one → **Chapter 3. Methodology**

Level two → 3.1 Sampling Method

Level three → *3.1.1 Participant Recruitment*

*Certificate, acknowledgement abstract and table of content should not have any page nos., List of figures, List of graphs, list of tables etc. should have roman **small case** page nos. in center of footer, and from chapter 1 to till last chapter page numbers should be in Arabic. Appendix and reference s should not have any page no.*

Add header and footer from chapter first till last chapter, no header and footer for rest of the report.

Header should have name of department at left hand corner and footer should have page number at center.

List of Figures

Note: All figure should be name in the format given i.e. Figure 1.1: Title

Description of figure should be added along with figure in respective chapter.

Numbers given to Figures, Tables and Equations should clearly indicate the chapter they belong to e.g. in Chapter 4 figures should be numbered as Fig. 4.1, Fig. 4.2, etc.; tables as Table 4.1, Table 4.2, etc; equations as (4.1), (4.2), etc.

Title of figures should be placed at the bottom of the figure whereas those of tables should be placed at the top.

List of Tables

Note: All tables should be name in the format given i.e. Table 1.1: Title

Description of table should be added along with figure in respective chapter.

List of Graphs

Note: All graphs should be name in the format given i.e. Graph 3-1: Title

Description of graph should be added along with figure in respective chapter.

List of Flow-charts

Note: All Flow Chart should be name in the format given i.e. Flow Chart 5-1: Title

Description of flow chart should be added along with figure in respective chapter.

List of Appendices

Chapter 1

Introduction

General introduction, Objective of the study, scope of the study, organization of project, motivation behind project work etc.

Problem statement:

Statement of the problem (Why you selected the project, which type of problem you are going to solved by designing this project), any its social Impact etc. and Objective behind your project work etc.

Chapter 2

Literature Survey

Related information available in standard books, journals, transaction, Internet websites, patent, market survey etc. till date (more emphasis on last 3 to 5 year). Here you have to give the Statement of Originality (What new/extra things you have added in your project)

- The type of research you did
- How you collected your data
- How you analyzed your data
- Any tools or materials you used in the research

If figures or tables are taken from a reference then the reference must be cited within the text, as well as, after the caption in the figure or table.

e.g. Face recognition has been very important issue in computer vision and pattern recognition over the last several decades. One difficulty in face recognition is how to handle the variations in the expression, pose and illumination when only a limited number of training samples are available [1]. **(This [1] shows the paper no. [1] that you have mentioned in your bibliography or references.)**

If you have to add figures from the literature ensure that they are clear and sufficiently large.

Chapter 3

System Development/ Methodology

The methodology section should generally be written in the past tense.

Chapter 4

System Development

Block diagram and its description, circuit diagram and its description software requirement in your project, specification, flowchart and explain the flow of your project, hardware requirement in your project and its specification, specific details of each components, blocks, it's specification. It is important to include at least one mathematical, analytical, experimental, computational term etc.

Chapter 5

Result/ System Performance/ Performance Analysis

Discussion of result and analysis of system developed either by at least two methods depending upon depth of standard. These methods normally used are Analytical /Testing /Computational/ Statistical/Experimental/or Mathematical. Results at various stages may be compared with various inputs. Output at various stages with same waveforms or signals or related information/parameters. Comparison of above results by at least two methods. Justification for the differences or error. Step by step results and discussion on how /why such type of results you got (give snapshots, table data, and figures step by step) Mention the objective and interpretation of graph, table etc.

Result should include testing of project that is consistency check, performance testing, parameter testing, like current, voltage, power, execution time etc.

Your view for choosing these methods

What are the criteria for validity and reliability in this type of research?

Chapter 6

Advantages, Disadvantages and Applications

Chapter 7

Conclusion and Future Scope

Conclusion should be based on result and future scope should include how you are going to over come drawback and how you're going to achieve improvement in your project.

References

Paper referred for study (Literature Survey) while implementing project are included in references. (Sample copy)

[1]   D. Goldberg, D. Nichols, B. M. Oki, D. Terry, "Using collaborative filtering to weave an information tapestry", *Communication of the ACM*, vol. 35, pp. 61-70, 1992.

[2]   P. Resnick et al., "GroupLens: an open architecture for collaborative filtering of netnews", Proc. ACM 1994 Conf. Computer Supported Cooperative Work*, pp. 175-186, 1994.*

[3]   University of Leicester Standing Committee of Deans (6/8/2002) Internet code of practice and guide to legislation. Accessed 8/8/02
http://www.le.ac.uk/committees/deans/codecode.html

[4]   Wallis, C 1992, 'Asymmetric dependence and mental representation', Psychology, vol. 3, no. 70, viewed 18 November 2003,

<http://psycprints.ecs.soton.ac.uk/archive/00000294/>.

[5]   Sternberg, R. J. (1993). The psychologist's companion (2nd ed.). Cambridge UK: Cambridge University Press.

Referencing Internet sites:
While citing reference to an internet site, after mentioning the name of the site (full web url), mention the date on which you have accessed it.

Referencing pictures or photos:
While citing reference to pictures or photographs, mention the title of the picture and then give full credits to who has taken the picture/photo as well as from where it was sourced.

Use equation editors of word processing packages for writing equations.

Appendix

Appendix I (Data Sheets)

Appendix II (Publication/ Achievements)

Paper published by students in any international/ national conference / Journal.

Certificate of project competition / exhibition etc.

Appendix III (Sponsorship Letter)

Appendix IV (Appreciation letter from any recognize industry, organization etc)

Appendix V

Bill/ Cost of material

Sr. No.	Name of Material	Quantity	Amount
Total Cost			/Rs.

Table 4.1: Cost of Material

Use 'LATEX' software for writing

1. Text should be printed on front and correct side of the watermark on quality bond paper.
2. Paper size- A4, 75 to 85 gsm paper.
3. Left Margin-1.5"
4. Right Margin-1/2"
5. Top Margin-1"
6. Bottom Margin-1"
7. Text Width 6"

Page numbers

1. First page of first chapter need not be printed anywhere
2. Second page onwards at right hand corner at ½ inch from right and top side
3. From second chapter onwards starting page number

General Attributes

1. Report Heading -All Capital—16 Font
2. Chapter heading -All Capital—14 Font
3. Sub chapter –title case-12 Font
4. Sub-Sub chapter –First Alphabet Capital case-12 Font
5. Page numbers for Index/Contents/Intent should be in roman
6. Title of the Report should not be more than two lines
7. Text pages should be in times new roman
8. All Greek words must be italic for example *e. g., etc., i.e., et al.*
9. The page of the Index/Contents/Intent heading should be below the words for appropriate sub chapter or sub-sub chapter.
10. Cover page should have in inverted commas, Symbol of Institute, Name of Department, and Institute

Binding

1. Black color, golden screen embossed
2. Width of report should have front side degree-B. E. With appropriate branch in bracket
3. Central place for Title and lower place for year of submission
4. Sample side is shown below:

(Report)

Golden Color Strips