APPLICATION OF MACHINE LEANING

Thesis submitted to CHRIST (Deemed to be University)
for the award of the Degree of

DOCTOR OF PHILOSOPHY

in

MECHANICAL ENGINEERING

by

ASHOK KUMAR

Under the Supervision of

Name of Supervisor
Academic Designation

and

Name of Co-Supervisor
Academic Designation

CENTER OF RESEARCH
CHRIST (DEEMED TO BE UNIVERSITY)
BENGALURU

NOVEMBER 2020

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APPROVAL OF THESIS

The thesis titled "**APPLICATION OF MACHINE LEANING** " by **Ashok Kumar** is approved by the Research Advisory Committee (RAC) for submission to the Centre for Research.

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Name of Co-Supervisor

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Name of the RAC member 2

Accepted to Centre for Research

_____ Seal

Name of the Director
Director, Centre for Research

DECLARATION

I, Ashok Kumar, hereby declare that the thesis entitled "**APPLICATION OF MACHINE LEANING**" is a record of original research work undertaken by me for the award of the degree of **Doctor of Philosophy** in Mechanical Engineering Discipline under the supervision of **Name of Supervisor**, Academic Designation, Name of Department, Bengaluru and **Name of Co-Supervisor**, Academic Designation, Name of Department, Bengaluru and has not formed the basis for the award of any degree, diploma, associate ship, fellowship, or titles.

I hereby confirm the originality of the work and that there is no plagiarism in any part of the dissertation.

Place: Bengaluru
Date: 31-10-2020

Ashok Kumar
Register No: 1RV16PEJ03
Name of the department
Name of the college
Christ (Deemed to be University)

CERTIFICATE

This is to certify that the thesis submitted by **Ashok Kumar** (Reg No. **1RV16PEJ03**), entitled "**APPLICATION OF MACHINE LEANING** " in fulfillment for the award of **Doctor of Philosophy** in Mechanical Engineering is a record of original research work carried out by him during the academic year 2015 to 2020 under our supervision.

The thesis has not formed the basis for the award of any degree, diploma, associateship, fellowship or other titles. We hereby confirm the originality of the work and that there is no plagiarism in any part of the dissertation.

Place: Bengaluru
Date: 31-10-2020

Name of Supervisor
Academic Designation
Name of Department
Name of the College
Bengaluru

Name of Co-Supervisor
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Name of Department
Name of the College
Bengaluru

ACKNOWLEDGMENT

Content here...

Ashok Kumar

To my beloved parents

ABSTRACT

Content...

Keywords: *Keyword1, Keyword2*

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GLOSSARY

Item	Description
Atomic Weight	The atomic weight is the average of the isotope weights weighted for the isotope distribution and expressed on the ^{12}C scale
Ohms Law	Current is proportional to voltage
IC Engine	**I**nternal **C**ombustion **E**ngine
AIR	**A**ir **I**ndia **R**adio
GUI	**G**raphical **U**ser **I**nterface
Speed of Light, c	$2.997\,924\,58 \times 10^8$ ms$^{-\mathrm{S}}$
π	$= 3.14$
P	Power in W (Js^{-1})
ω	Angular frequency in rads^{-1}

ABBREVIATIONS

Abbreviations	Full Form of Abbreviations
DAQ	**D**ata **AcQ**uisition
FRA	**F**requency **R**esponse **A**nalysis
FRD	**F**requency **R**esponse **D**ata
GUI	**G**raphical **U**ser **I**nterface
IoT	**I**nternet **o**f **T**hings
PSO	**P**article **S**warm **O**ptimization
RCM	**R**eliability **C**entered **M**aintenance
TOU	**T**ime-**O**f-**U**se

PHYSICAL CONSTANTS

Constant Name	Symbol		Constant Value (with units)
Speed of Light	c		$2.997\,924\,58 \times 10^{8}$ ms$^{-\mathrm{S}}$
Pi	π	=	3.14

SYMBOLS

Symbol	Description
λ	Eigen Value
χ	Cross correlation
ε	Dielectric constant

CHAPTER NO. 1

INTRODUCTION

1. INTRODUCTION

1.1 BACKGROUND

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1.2 NEED OF THIS RESEARCH

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CHAPTER NO. 2

DESIGN AND DEVELOPMENT

2. DESIGN AND DEVELOPMENT

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2.1 Sample Figures

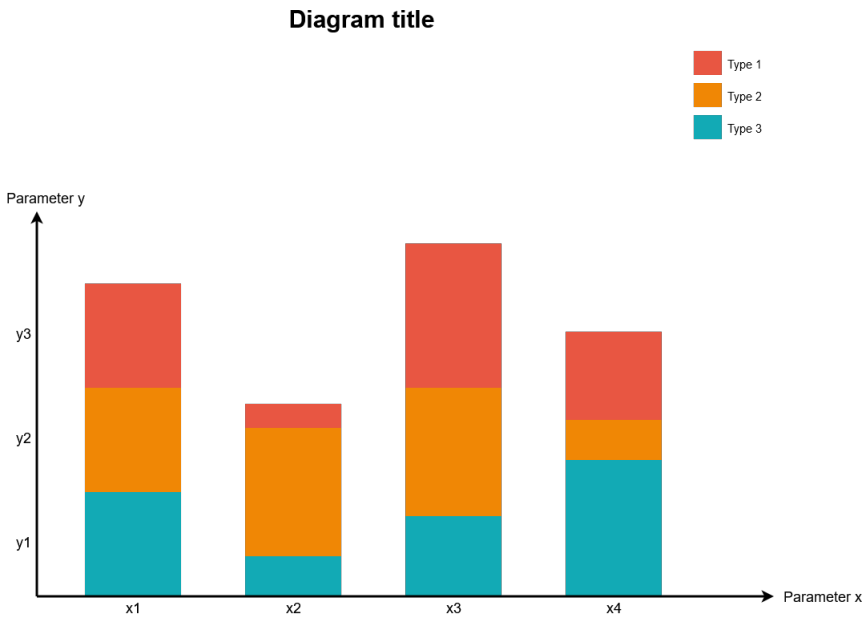

FIGURE 2.1: Cost distribution

2.2 Citations

Citation [1]

Citation [2]

Citation [3]

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Index 2

2.3 Sample Table

TABLE 2.1: Student Marks

Name	Marks
Ajay	10
Vinay	20

Bibliography

[1] R Venkataswamy, K Uma Rao, and P Meena. Internet of things based metaheuristic reliability centered maintenance of distribution transformers. *IOP Conference Series: Earth and Environmental Science*, 463:012047, apr 2020. ISSN 1755-1315. doi: 10.1088/1755-1315/463/1/012047. URL https://iopscience.iop.org/article/10.1088/1755-1315/463/1/012047.

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PUBLICATIONS AND PRESENTATIONS

1. Papers in Journals
    (a) Journal 1
    (b) Journal 2
    (c) Journal 3
2. Paper presented in National conference
    (a) Conference 1
    (b) Conference 2
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3. Paper presented in International conferences
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Appendix A. Title

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Appendix B. Title

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