TITLE OF THE THESIS

Submitted in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

by

STUDENT NAME

April - 2024

DECLARATION

I, **STUDENT NAME** hereby declare that the thesis entitled "**Title of the Thesis**" submitted to Vellore Institute of Technology (VIT), Chennai for the award of the degree of Doctor of Philosophy is a record of bonafide work carried out by me under the supervision of **DR. DAVID RAJ MICHEAL**, Assistant Professor, School of Advanced Sciences, Vellore Institute of Technology, Chennai.

I further declare that the work reported in this thesis has not been submitted and will not be submitted, either in part or in full, for the award of any other degree or diploma in this institute or any other institute or university.

Place : Chennai

Date :

Signature of the candidate

CERTIFICATE

This is to certify that the thesis entitled "**Title of the Thesis**" is prepared and submitted by **Student Name (Reg. No. 22PHD1000)**, School of Advanced Sciences, Vellore Institute of Technology, Chennai, for the award of the degree of *Doctor of Philosophy* , is a record of bonafide work carried out by him/her under my supervision, as per the VIT code of academic and research ethics.

The contents of this report have not been submitted and will not be submitted either in part or in full, for the award of any other degree or diploma in this institute or any other Institute or University. The thesis fulfills the requirements and regulations of the Institute and in my opinion meets the necessary standards for submission.

Place : Chennai
Date :

Signature of the Guide
Dr. David Raj Micheal

ABSTRACT

Abstract to your work. Smith 2022

Keywords: *Machine Learning, Deep Learning...*

ACKNOWLEDGEMENTS

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Place : Chennai
Date :

Student Name
Reg. No: 22PHD1000

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LIST OF SYMBOLS AND ABBREVIATIONS

ω	-	Absolute frequency
HOA	-	Acetic acid
ψ	-	sdjfk

Chapter 1

INTRODUCTION

1.1 Thesis

A thesis or dissertation is a document submitted in support of candidature for an academic degree or professional qualification presenting the author's research and findings. In some contexts, the word "thesis" or a cognate is used for part of a bachelor's or master's course, while "dissertation" is normally applied to a doctorate, while in other contexts, the reverse is true.

These guidelines are provided to formally expose you to the various ethical and technical issues involved in writing up your work and the format you are required to adhere to while submitting your work as Ph.D / Ph.D [Integrated]/ M.Tech [By Research]/ Synopsis / Thesis dissertation.

The scholars are expected to read carefully the Guidelines given in the sequel and metic- ulously follow them in the preparation of the Thesis. Non-compliance with any of these in- structions may lead to the rejection of the Thesis submitted.

1.2 General

The manual is intended to provide broad guidelines to the research scholars in the preparation of the Thesis. In general, the Thesis shall report, in an organized and scholarly fashion, an account of original research work of the research scholar leading to the

discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware oriented, etc.). Thesis shall demonstrate a quality as to make a definite contribution to the advancement of knowledge and the research scholar's ability to undertake sustained research and present the findings in an appropriate manner with actual accomplishments of the work.

1.3 Tables

Table 1.1: Data units, sources, and dates

Variable	Dates	Units	Source
Nominal Physical Capital Stock	1950-1990	Billions US$	Nehru and Dhareshwar (1993)
Total Population	1950 - 1990	Billions	Nehru and Dhareshwar (1993)
Nominal GDP	1950 - 1990	Billions US$	PWT
Real GDP per capita	1950 - 1990	2005 US$ per capita	PWT

1.4 Figures

1.5 Citation Format

All references and citation should be of the standard "Harvard Style" (Doe 2009) (Author, Year) format. Alishahi et al. 2009, (Haykin 2004; Doe 2009)

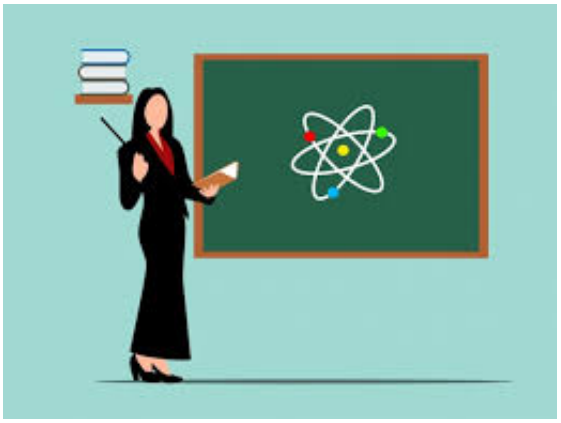

Figure 1.1: Sample picture of Teaching

(a) Example 01

(b) Example 02

Figure 1.2: Commonly available Examples

1.6 Size of Thesis

The size of the Thesis shall be normally between 100 and 350 pages of typed matter reckoned from the first page of Chapter 1 to the last page of the thesis excluding reference section.

1.6.1 Manuscript Preparation

Chapter 2

OVERVIEW / LITERATURE REVIEW

This chapter should include the brief description of the whole-proposed software system that is to be developed, system preliminary design, system planning and the details of the hardware & software used. System analysis & design vis-à-vis user requirements (Preliminary design) should also be represented as a block diagram. System planning is represented as either as PERT chart or as Gantt chart. A thorough review of the literature with respect to the chosen field should be projected. Should include earlier and current reports along with author citation and year. In other words it should be a collection and a record of past land recent work. Summarize major contributions of significant studies and articles related to your field under review, maintaining the focus established in the introduction. Evaluate current "state of art". Point out major gaps, inconsistencies in theory and findings. Conclude by providing some insight into the relationship between the central topic of the literature review and the areas / issues pertinent to future study.

2.1 Some section

some dummy data is written here... Please change it according to your need...

Chapter 3

SYSTEM DESIGN

This chapter should describe the engineering specifications and targets critically evaluating the existing benchmarks and specifically identifying the gaps which the project is intended to fill; It should show how the concepts evolved and were evaluated also should describe and justify the formation of the final product which may include possibly a number of subsections such as:

- Details of the development. System architecture indicating various modules / components and their interaction.
- Feasibility assessment report.
- Entity relationship diagram / analysis / DFD / State Transition Diagram.

3.1 Some section

some dummy data is written here... Please change it according to your need...

If you adopt an object-oriented method, you will include the following in this chapter:

- Sequence diagrams for each module and entire system.
- Class diagrams or any other UML diagram for each module and entire system.

Chapter 4

IMPLEMENTATION OF SYSTEM/ METHODOLOGY

This chapter should reflect development of the project such as: implementation, experimentation, optimization, evaluation etc. and unit integration testing should be discussed in detail. The unit test cases and system test cases should describe the input, expected output and output obtained. It can also include the details of the tools used for implementation, justification for the selected tool and the detailed description of implemented modules. Screen shots, Pseudocode etc. In case of simulation, modeling, programming techniques, programming steps, flow-charts, simulation results, verification of the approach followed and the like depending on the nature of the project.

4.1 Some section

some dummy data is written here... Please change it according to your need...

The materials required, techniques followed, sample preparations, research design and methods should be clearly mentioned. The experimental procedure should be clearly defined.

Chapter 5

RESULTS AND DISCUSSIONS

This is part of the set of technical sections, and is usually a separate section for experimental/design papers. This chapter should include:

- Performance metrics.
- Parameters under study
- Comparison of cases/ studies with respect to existing and proposed work / algorithm/ design–comparison/ with the published data and deviations / improvements if any as expected in the aims and objectives
- Expected and obtained results- Analysis of the results- statistical analysis, plots, simulated results, synthesis of process, interpretation of the results
- Detailed results for each logical component of the project with an accompanying discussion section [Can include screen shots, graphs etc.].
- The results can be tabulated, graphically presented and photographs to be displayed if any.
- Discuss the results which should include an interpretation of the results and their relationship to the aims and objectives.

Chapter 6

SUMMARY AND FUTURE WORK

This chapter should summarize the key aspects of your project (failures as well as successes) and should state the conclusions you have been able to draw. Outline what you would do if given more time (future work). Try to pinpoint any insights your project uncovered that might not have been obvious at the outset. Discuss the success of the approach you adopted and the academic objectives you achieved. Avoid meaningless conclusions, [e.g. NOT " I learnt a lot about C++ programming "]. Be realistic about potential future work. Avoid the dreaded: "All the objectives have been met and the project has been a complete success". You have to crisply state the main take-away points from your work. Describe how your project is performed against planned outputs and performance targets. Identify the benefits from the project. Be careful to distinguish what you have done from what was there already. It is also a good idea to point out how much more is waiting to be done in relation to a specific problem, or give suggestions for improvement or extensions to what you have done. Future scope of the work for improvement may also be included

LIST OF PUBLICATIONS RELEVANT TO THE THESIS

John Smith (Jan. 2021). “Special theory of relativity - A Survey”. In: *Scientific American* 327.1, pp. 44–49

John Smith (Jan. 2024). “Applicatons relativity theory”. In: *Scientific Reports* 37.1, pp. 40–44

Chapter A

APPENDIX CHAPTER

Here is the appendix chapter. Usually, the code and the other related items are given here.

REFERENCES

Alishahi, Kasra et al. (2009). “Bounds on the sum capacity of synchronous binary CDMA channels”. In: *IEEE Transactions on Information Theory* 55.8, pp. 3577–3593.

Doe, Ringo (June 2009). *This is a test entry of type @ONLINE*. URL: `http://www.test.org/doe/`.

Haykin, Simon (2004). *Kalman filtering and neural networks*. Vol. 47. John Wiley & Sons.

Smith, John (Jan. 2021). “Special theory of relativity - A Survey”. In: *Scientific American* 327.1, pp. 44–49.

— (Jan. 2022). “The Effects of Climate Change”. In: *Scientific American* 327.1. This is a sample entry for an article in a magazine., pp. 44–49.

— (Jan. 2024). “Applicatons relativity theory”. In: *Scientific Reports* 37.1, pp. 40–44.