



Title of the Master Thesis

A Thesis Submitted for the Degree of Master of ...

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Declaration

| Name of the student: |
|-------------------------------|
| Registration number: |
| Name of the Degree Programme: |
| Project/Thesis title: |

- 1. The project/thesis is my original work and has not been submitted previously for a degree at this or any other University/Institute. To the best of my knowledge, it does not contain any material published or written by another person, except as acknowledged in the text.
- 2. I understand what plagiarism is, the various types of plagiarism, how to avoid it, what my resources are, who can help me if I am unsure about a research or plagiarism issue, as well as what the consequences are at University of Colombo School of Computing (UCSC) for plagiarism.
- 3. I understand that ignorance is not an excuse for plagiarism and that I am responsible for clarifying, asking questions and utilizing all available resources in order to educate myself and prevent myself from plagiarizing.
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- 5. I assure that any work I submit with my name on it will reflect my own ideas and effort. I will properly cite all material that is not my own.
- 6. I understand that there is no acceptable excuse for committing plagiarism and that doing so is a violation of the Student Code of Conduct.

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| | |

Certified by Supervisor(s)

This is to certify that this project/thesis is based on the work of the above-mentioned student under my/our supervision. The thesis has been prepared according to the format stipulated and is of an acceptable standard.

| | Supervisor 1 | Supervisor 2 | Supervisor 3 |
|-----------|--------------|--------------|--------------|
| Name | | | |
| Signature | | | |
| Date | | | |

I would like to dedicate this thesis to...

ACKNOWLEDGEMENTS

It is expected of the candidate to acknowledge all persons who facilitated the research described in the thesis and organizations that have helped in matters scientific, as well as the sources of funding that made the research possible.

ABSTRACT

Each thesis must contain an abstract, typed on a separate single sheet. The thesis abstract provides a summary of the thesis. The purpose of an abstract is to give a potential reader enough information about your thesis that a reader can decide whether or not to refer the complete work. You should make sure that the abstract includes an indication of all the elements that would make your thesis worth referring. The abstract should be a concise description of the problem addressed in the research work, the method of solving them, the results, evaluation and conclusions. The abstract should not exceed 500 words. At the end of the Abstract, you should provide a list of keywords. Since you are the person most familiar with your own research and its significance, it is appropriate that you should be involved in choosing the terms that help other scholars get access to your work.

LIST OF PUBLICATIONS

List of publications (Journals, Conference Papers, Awards prizes and nominations, Magazine Articles, Demos and Exhibitions) by the candidate in Harvard reference style

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INTRODUCTION

The introduction chapter should provide the overview of the work in a manner that motivates the reader. It is very important to define the problem clearly and concisely.

This chapter puts the work into context. Having read it, the reader should be able to get an idea on the:

- Area of study
- Rationale
- Key information on already available systems/published research
- Author's approach to the problem.
- Importance
- Contribution and novelty

The introduction chapter shall contain sections such as Motivation, Statement of the problem, Research Aims and Objectives, Scope. The chapter shall be concluded with the structure of the thesis.

1.1 Motivation

Here is the section of the thesis where you describe your motivation for conducting a study on given research topic.

1.2 Statement of the problem

A problem statement is the description of an issue currently existing which needs to be addressed. It provides the context for the research study and generates the questions which the research aims to answer. The statement of the problem is the focal point of any research. A good problem statement is just one sentence (with several paragraphs of elaboration).

1.3 Research Aims and Objectives

The primary focus of your research is usually expressed in terms of aims and objectives.

1.3.1 Aim

Aims are statements of intent. They are usually written in broad terms. They set out what you hope to achieve at the end of the project.

1.3.2 Objectives

Objectives should be specific statements that define measurable outcomes, e.g. what steps will be taken to achieve the desired outcome. When writing your objectives try to use strong positive statements

1.4 Scope

One of the first tasks of a researcher is defining the scope of a study, i.e., its area (theme, field) and the amount of information to be included. Narrowing the scope of your thesis can be time-consuming. Paradoxically, the more you limit the scope, the more interesting it becomes. This is because a narrower scope lets you clarify the problem and study it at greater depth, whereas very broad research questions only allow a superficial treatment.

1.5 Structure of the Thesis

The outline gives an overview of the main points of your thesis. It clarifies the structure of your thesis and helps you find the correct focus for your work. The outline can also be used in supervision sessions, especially in the beginning. You might find that you need to restructure your thesis. Working on your outline can then be a good way of making sense of the necessary changes. A good outline shows how the different parts relate to each other, and is a useful guide for the reader.

LITERATURE REVIEW

This chapter shall give essential background information referring to published material in research papers, URLs (from credible sources), magazine articles and similar. This chapter should include a critical review of similar research published in recent years in credible publications such as journals and peer reviewed conferences etc.

2.1 A Literature Review

A good literature survey should demonstrate your awareness and understanding of the background literature related to the research. It should begin by setting the proposed work in a wide context, and progress to a more detailed account of the **most relevant work in the area**, including **up-to-date** references. Reviewing the literature can help to identify questions and issues that have not yet been addressed in the area of study, ideally these are the questions that will be addressed through your work. It may also be appropriate to incorporate criticisms of previous work, although you need to take care here that your criticisms do not reflect a lack of proper understanding.

Candidates are encouraged to refer web on how to conduct "literature review" and academic writing style. Contents of this section should not just provide a list of references followed by a short summary of each of them. Instead the review should be organized and structured in a meaningful way, and the themes and relationships between the references identified. It may be necessary to redraft the review several times in order to arrive at a text that is clearly written, easy to understand, and **displays an in-depth understanding of the area of research**. The review would include taxonomies, tabular comparisons of past work, approaches etc. In summary, you should consider the following points when writing your literature review:

- The literature survey should be focused and concise. Only references that are directly relevant to the work should be reviewed.
- A literature review is not undertaken for its own sake; it is included in a dissertation because it allows you to demonstrate that you have an in depth understanding of the background.
- References should **not** be reviewed simply by listing each source of reference in turn
 and writing a short paragraph on individual paper leading to chronological list of
 summaries. Rather, the themes and relationships between reference sources should be

identified (i.e.; the literature review should be organized in a useful and meaningful way.)

- The literature survey should be up-to-date. There should be evidence that the author has read recent literature in the relevant field.
- The citations should be properly included in the text where appropriate. It is advised you refer to **Harvard** references style in text. Note that there is a clear difference between a list of references and a bibliography.

2.2 Presentation of Scientific Material

All illustrations (maps, chart, graphs, photographs, drawings and diagrams) are referred to as Figures. Tables and figures should be able to stand alone from the text. Provide cross-references (to earlier sections) where applicable.

All figures and tables should be aligned to the left margin, not centered.

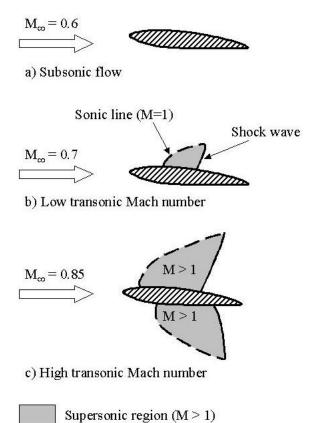


Figure 1: Airfoil Picture:

Font for table text should be Times New Roman – maximum size 12 pt. Use the same font size for similar tables. If there is a need to reduce the font size to fit the table onto one page, the minimum font size allowed is Times New Roman 9 pt. Within tables, use italics for titles.

Table 1: Properties for Multilayer Cylinder Coil:

| Inductance(up) | 8.96 | 15 | 50.78 | 350 |
|-------------------------|------|-------|-------|------|
| Diameter(cm) | 5 | 2 | 6.5 | 2 |
| Size of center hole(cm) | 4.75 | 0.003 | 6.3 | 0.03 |
| Resistance(ohm) | 0.4 | 0.4 | 0.4 | 0.4 |

Both graph axes must be labelled clearly (using not less than Times New Roman 9 pt). Remember to check the spelling of all labels, as often graphs and figures are not easily edited at a later production stage.

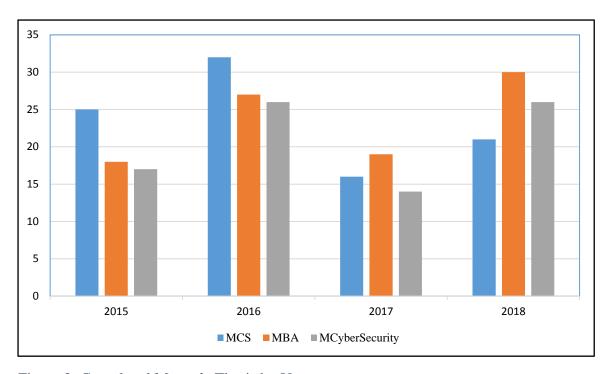


Figure 2: Completed Master's Thesis by Year

METHODOLOGY

This chapter is an important chapter in a research type dissertation and the methodology shall be detailed well. Aspects relating to the proof of concept specification which includes process flow diagrams, design assumptions relating to the scope of the proof of concept, prototype architecture, algorithmic design details etc. shall be included. A key aspect to be detailed would be the algorithmic contribution made in a research type project.

EVALUATION AND RESULTS

This is an important chapter of the dissertation which presents the findings and the evaluation of the research. Chapter may include aspects such as evaluation protocol, designed experiments, results obtained and critical evaluation of the research work. The results obtained shall be critically analyzed using appropriated statistical methods. A mere list of charts/graphs would **not** be sufficient and a good critical review of the results obtained need to be presented.

CONCLUSION AND FUTURE WORK

This chapter summarizes the work, discusses its findings and contributions, points out limitations of the current work, and also outlines directions for future research. This is an important chapter in a dissertation therefore you are encouraged to refer web on how to write the conclusion chapter. The chapter may include aspects such as major findings, lessons learnt, and achievement of objectives, how the work could be extended. The future work should not be a mere list functions rather author's recommendations on areas for improvements and how the work would be extended.

APPENDICES

Appendices contain the material that is related but supplementary to the main work. Adopt a system of lettering appendices and keep to the system. For example, the first appendix referred to in the main text could be 'A', the second 'B', etc. Similarly, if you give one appendix a title, name any others. A list of appendices should appear after the Contents page. Examples of appendix materials:

- Datasets
- Full results
- Source codes

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