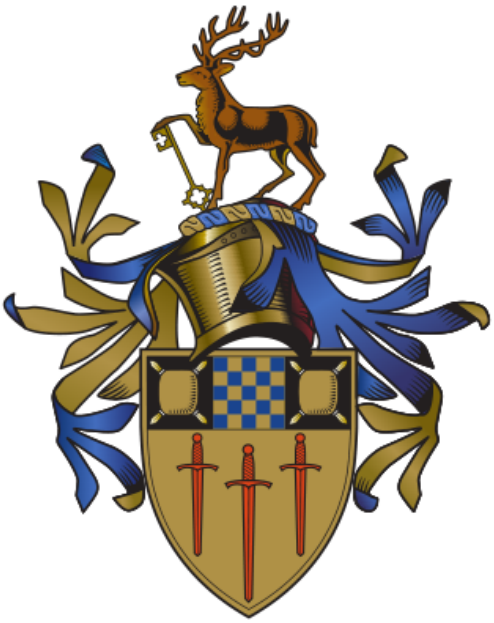
Thesis Title

by

Author Name

December 19, 2024



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Confirmation Report

Presented as part of the requirements for the degree of
Doctor of Philosophy

Declaration

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Acknowledgements

In this section, you would typically thank those who have supported you during your research or writing process. This may include academic advisors, colleagues, family members, or anyone who contributed to the completion of your work.

Abstract

This document provides a comprehensive overview of the LaTeX template used for generating professional academic papers. It includes sections on formatting, structure, and best practices for creating a well-organized and visually appealing document. This abstract serves as a placeholder to demonstrate where the summary of your work should be placed.

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Chapter 1

Introduction

If you are already familiar with the basics of how to use LaTeX, you can skip this section and go straight to 2.7, as it contains reference material useful to all LaTeXusers.

For chapters, sections, and subsections, you can use labels to refer to parts of your thesis. Cross-referencing a labeled item can be done as follows: 1, 1.1, 1.1.1, and 1.1.1. Even if an item does not have a number, it will still direct you to the referenced part.

1.1 This is a Section

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1.1.1 This is a Subsection

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This is a Subsubsection

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quis lorem bibendum diam dictum vulputate vel eu ante. Sed dolor ligula, semper ut volutpat nec, sollicitudin id lacus. Ut mattis felis ut suscipit elementum.

1.2 Formulae and Maths

Chapter 2

Demos

2.1 Math

2.1.1 Inline Math

Inline math is used when you want to include equations within the flow of your text. For example, the mean squared error loss function is calculated as: $\sum_{i=1}^{D}(x_i - y_i)^2$ This equation is embedded inline with the text.

2.1.2 Display Math

Display math is used when you want to present a formula on its own line. Here are some examples:

$$L_\delta = \begin{cases} \frac{1}{2}(y-\hat{y})^2 & \text{if } |(y-\hat{y})| < \delta \\ \delta((y-\hat{y}) - \frac{1}{2}\delta) & \text{otherwise} \end{cases} \tag{2.1}$$

This presents the Huber loss function on a separate line.

A few more examples:

$$MI(U,V) = \sum_{i=1}^{|U|}\sum_{j=1}^{|V|} \frac{|U_i \cap V_j|}{N} \log \frac{N|U_i \cap V_j|}{|U_i||V_j|} \tag{2.2}$$

$$\text{Sensitivity} = \text{Recall} = \frac{TP}{TP+FN} \text{Specificity} = \frac{TN}{FP+TN} \tag{2.3}$$

To reference equations in your text, use the label parameter as shown above and refer to it using 2.3.

If you want to exclude an equation from numbering, use the '*' parameter:

$$1 + 1 = 2$$

2.2 Tables

You can create tables using the following structure. Adjust the columns and rows as needed in the visual editor of Overleaf.

To reference a table, use 2.1. It is good practice to prefix labels with their type (e.g., 'tab' for tables, 'fig' for figures).

Parameter	Position
h	Place the float here, i.e., approximately at the same point it occurs in the source text (however, not exactly at the spot)
t	Position at the top of the page.
b	Position at the bottom of the page.
p	Put on a special page for floats only.
!	Override internal parameters LaTeX uses for determining "good" float positions.
H	Place the float at precisely the location in the LaTeX code. Requires the float package. This is somewhat equivalent to h!.

Table 2.1: Parameters for float positioning. These apply to images and tables as well.

2.3 Images

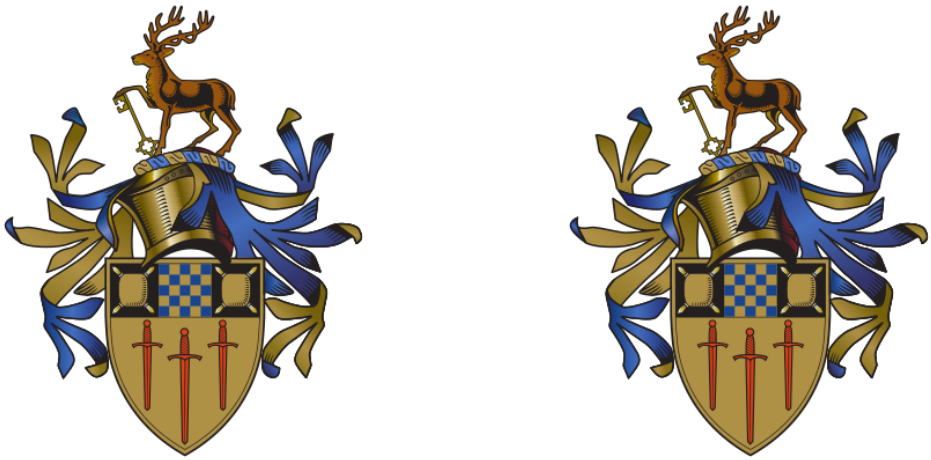

Figure 2.1: A demonstration of tiling two images together.

This demonstrates how to tile images together as one figure. You can adjust the number of images and their widths as needed. To reference this figure, use 2.1.

2.4 Lists

2.4.1 Unordered Lists

- This
- is
- how
- you

- create
- an
- unordered
- list

2.4.2 Ordered Lists

1. This
2. is
3. an
4. ordered
5. list

2.5 Code

```
somepythonlist = []
for i in range(0, 1000):
    print(i)
    somepythonlist.append(i)

\LaTeX
\cite{turing1950mind}
```

This demonstrates how to include code segments in LaTeX. All commands are ignored in ‘verbatim‘ mode, displaying exactly what you write.

2.6 References and Others

2.6.1 References

Citing references adds them to the bibliography section. Use ‘[1]‘ to cite a reference. Ensure your ‘bibliography.bib‘ file includes the proper BibTeX entries. Papers from Google Scholar or publishers often provide a BibTeX citation.

Other examples of references: [2], [3]

2.6.2 Acronyms

To use acronyms, link them in the abbreviations file: Institute of Electrical and Electronics Engineers (IEEE) for the full name. Use ‘Institute of Electrical and Electronics Engineers‘ for just the name, or ‘ACM‘ for the short form. Ensure acronyms are defined in ‘abbreviations.tex‘.

2.7 Etc. and Final Words

Here is a link for learning more about LaTeX. It's a great reference tool with many examples.

Writing a thesis is challenging, but remember to take breaks, de-stress, and take care of yourself. Good luck!

Thanks for reading,

Creator: Aaron

Edit & Consistency: Alireza (LaTeX 2024)

Bibliography

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[2] G. M. Hopper, "The education of a computer," in *Proceedings of the 1952 ACM national meeting (Pittsburgh)*, 1952, pp. 243–249.

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