# Latex thesis template

by

**Chuck Norris**

**Thesis**

*submitted in fulfilment*

*of the requirements for the Degree of*

## Doctor of Philosophy in Ass Kicking

Supervisor: Prof Dr. Al Caholic

Associate Supervisor: Dr. Seymour Butts


**The University of Newcastle**

**Faculty of Engineering and Built Environment**

**School of Electrical Engineering and Computing**

August 2020

This research was supported by an Australian Government Research Training Program (RTP) Scholarship

# Latex thesis template

STATEMENT OF ORIGINALITY

I hereby certify that the work embodied in the thesis is my own work, conducted under normal supervision. The thesis contains no material which has been accepted, or is being examined, for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968 and any approved embargo.

Chuck Norris
26th August 2020

# Latex thesis template

ACKNOWLEDGMENT OF AUTHORSHIP

I hereby certify that the work embodied in this thesis contains published papers and preprints of which I am a joint author. I have included below a written declaration endorsed in writing by my supervisor, attesting to my contribution to the joint work.

By signing below I confirm that Chuck Norris contributed as main author to the published papers and preprints entitled

- Paper 1 details
- Paper 2 details
- Paper 3 details
- ...

Prof Dr. Al Caholic
26th August 2020

# Acknowledgments

I here acknowledge my advisors, and everybody else that I need to acknowledge. Thank you.

*Chuck Norris*

*The University of Newcastle*

*August 2020*

# Contents

# Abstract

The thesis abstract text goes here.

# 1. Introduction

LaTeX is a document preparation system for high-quality typesetting. It is most often used for medium-to-large technical or scientific documents but it can be used for almost any form of publishing.

## 1.1 An example of text and a list

LaTeX is based on Donald E. Knuth's TeX typesetting language or certain extensions. LaTeX was first developed in 1985 by Leslie Lamport, and is now being maintained and developed by the LaTeX3 Project. LaTeX is available for free by anonymous ftp [1]. LaTeX contains features for:

- Typesetting journal articles, technical reports, books, and slide presentations.
- Control over large documents containing sectioning, cross-references, tables and figures.
- Typesetting of complex mathematical formulas.
- Advanced typesetting of mathematics with AMS-LaTeX.
- Automatic generation of bibliographies and indexes.
- Multi-lingual typesetting.
- Inclusion of artwork, and process or spot colour.
- Using PostScript or Metafont fonts.

## 1.2 An example of an image inserted

LaTeX is a powerful typesetting system, used for producing scientific and mathematical documents of high typographic quality. Unlike WYSIWYG tools such as FrameMaker and Word, it uses plain text files that contain formatting commands. It's big, open source, stable and used by many technical

[1] https://latex-project.org/ftp.html

publishing companies. It's also relatively unknown in the technical writing community. This article overviews LaTeX, and directs you to sources of information. Figure 1.1 shows the beautiful logo.

Figure 1.1: The LaTex logo

Avoid using .JPEG, JPG, GIF, BMP or any other bitmap file. Always prefer to use .SVG or .PDF vector files when possible, the result will be much better. After inserting your figure, just continue to writing your text.

# 2. Something else

An small example using tables and algorithms.

## 2.1 Tables

Table 2.1 is an example of table. Play around with the arraystretch parameter to get more or less space between rows. The size is set to textwidht, you can also use amounts in inches or centimeters.

| Network | Class | Nodes | Edges | AVG Degree | Max Modularity |
|---|---|---|---|---|---|
| Zakary's Karate Club | Real world network | 34 | 78 | 4.59 | 0.4198 |
| Lusseau's Dolphins | Real world network | 62 | 159 | 5.13 | 0.5285 |
| American College Football | Real world network | 115 | 613 | 10.66 | 0.6046 |
| Jazz Musicians | Real world network | 119 | 2742 | 27.70 | 0.4451 |

Table 2.1: List of benchmark networks.

## 2.2 Algorithms

And here, just an small example of an algorithm.

$Input : (Population_0, Tournment\_Size)$;
$Population_1 = New\_Population$;
$Population_1 \leftarrow \{Indindividual_1, ..., Individual_{Tournment\_Size}\}$;
**for** $i = 0; \leqslant Tournment\_Size$ **do**
    $Population_1[i] \leftarrow Population_0[random[0, Tournment\_Size]]$;
**end**
$Output : Population_1.Best.$

**Algorithm 1:** Tournament selection.

**Citations:** and here, is how do you cite with a single reference [2], or with several [1, 2]. Basically, you have here all that you need to build your thesis with LaTeX. Have fun!

Using an acronym: deep neural network (DNN)

# Bibliography

[1] D. E. Goldberg and J. H. Holland. Genetic algorithms and machine learning. *Machine learning*, 3(2):95–99, 1988.

[2] G. R. Harik, F. G. Lobo, and D. E. Goldberg. The compact genetic algorithm. *Evolutionary Computation, IEEE Transactions on*, 3(4):287–297, 1999.

# List of Figures

# List of Tables