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Masters Dissertation  
Master's in Informatics Engineering

Dissertation supervised by  
**Supervisor Name**  
**Co-Supervisor Name**

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# Acknowledgements

Write your acknowledgements here. Do not forget to mention the projects and grants that you have benefited from while doing your research, if any. Ask your supervisor about the specific textual format to use. (Funding agencies are quite strict about this.)

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I hereby declare having conducted this academic work with integrity.

I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

I further declare that I have fully acknowledged the Code of Ethical Conduct of the University of Minho.

University of Minho, Braga, october 2022

Author's full name

# Abstract

Write abstract here (en)

**Keywords** keywords, here, comma, separated



## Resumo

Escrever aqui o resumo (pt)

**Palavras-chave** palavras, chave, aqui, separadas, por, vírgulas

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# Acronyms

**GCD** Greatest Common Divisor.

**LCM** Least Common Multiple.

**PDR** Preliminary Dissertation Report.

**SOA** State of the Art.

# Glossary

**formula** A mathematical expression.

**latex** Is a markup language specially suited for scientific documents.

**mathematics** Mathematics is what mathematicians do.

# **Part I**

## **Introductory material**



## **Chapter 1**

# **Introduction**

Context, motivation, main aims.

## Chapter 2

# State of the Art

State of the art review; related work.

## 2.1 Citations

Example of a citation: [Goossens et al. \[1997\]](#), cf. this entry in the `dissertation.bib` file. Another way of citing is [[Kernighan and Ritchie, 1988](#)].

## 2.2 Mathematical expressions

The mass-energy equivalence is described by the famous equation

$$E = mc^2 \tag{2.1}$$

discovered in 1905 by Albert Einstein. In natural units ( $c = 1$ ), the formula expresses the identity

$$E = m$$

## 2.3 Footnotes

This is a footnote example<sup>1</sup>.

## 2.4 Acronyms and Glossary

Given a set of numbers, there are elementary methods to compute its [Greatest Common Divisor](#), which is abbreviated [GCD](#). This process is similar to that used for the [Least Common Multiple \(LCM\)](#).

---

<sup>1</sup> The quick brown fox jumps over the lazy dog.

The **Latex** typesetting markup language is specially suitable for documents that include **mathematics**. **Formulas** are rendered properly and easily once one gets used to the commands.

## 2.5 Index

In this example, several keywords will be used which are important and deserve to appear in the Index.

Terms like generate and some will also show up. Terms in the index can also be nested .

Cf. the `dissertation.bib` file to see some index definitions like **UMinho** .

## Chapter 3

# The problem and its challenges

The problem and its challenges.

### 3.1 Images

Example of inserting an image as displayed text,



— wrapped into the text, bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla  
bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla  
bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla  
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bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla bla-bla  
— or as a floating body.



Figure 1: Caption

# **Part II**

## **Core of the Dissertation**

## **Chapter 4**

### **Contribution**

Main result(s) and their scientific evidence

#### **4.1 Introduction**

#### **4.2 Summary**

## **Chapter 5**

# **Applications**

Application of main result (examples and case studies)

### **5.1 Introduction**

### **5.2 Summary**

## **Chapter 6**

# **Conclusions and future work**

Conclusions and future work.

## **6.1 Conclusions**

## **6.2 Prospect for future work**



## Chapter 7

### Planned Schedule

#### 7.1 Activities

Task	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Background and SOA	•	•	•							
PDR preparation		•	•	•						
Contribution				•	•	•	•	•	•	
Writing up							•	•	•	•

Table 1: Activities Plan

# Bibliography

Michel Goossens, Sebastian Rahtz, and Frank Mittelbach. *The LaTeX Graphics Companion*. Addison-Wesley, 1997. ISBN 0-201-85469-4.

B.W. Kernighan and D.M. Ritchie. *The C Programming Language (ANSI C)*. Prentice Hall Software series, 2nd edition, 1988.

# Index

generate, 4

Index, 4

    nested, 4

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University of Minho, 4

# **Part III**

## **Appendices**

## **Appendix A**

### **Support work**

Auxiliary results which are not main-stream.

## **Appendix B**

### **Details of results**

Details of results whose length would compromise readability of main text.

## **Appendix C**

### **Listings**

Should this be the case.

## Appendix D

# Tooling

(Should this be the case)

Anyone using [L<sup>A</sup>T<sub>E</sub>X](#) should consider having a look at [TUG](#) , the [T<sub>E</sub>X Users Group](#) .





Place here information about funding, FCT project, etc. in which the work is framed. Leave empty otherwise.