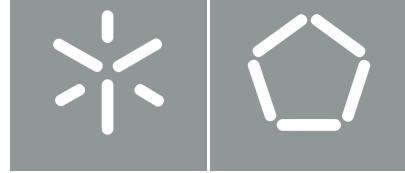


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Master's Dissertation in Informatics Engineering

Dissertation supervised by  
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I hereby declare having conducted this academic work with integrity.

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

University of Minho, Braga, september 2025

Author's full name

## **Abstract**

Write abstract here (in English)

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

## **Resumo**

Escrever aqui o resumo (em português)

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

# **Contents**

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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 document.

**Mathematics** Mathematics is what mathematicians do.

**Typst** A markup-based typesetting system that is powerful and easy to learn.

# **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: [1] or [1] “The Rust Programming Language.” [Online]. Available: <https://doc.rust-lang.org/book/>. This entry is in the `bibliography.yml` file.

`Typst` also supports the `LaTeX .bib` file format, `BibTeX`, but the `Hayagriva YAML format` is easier to use.

Check more information about bibliography [here](#) and [here](#).

#### 2.2 Mathematical expressions

The mass-energy equivalence is expressed by the equation

$$E = mc^2 \tag{1}$$

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

$$E = m$$

Check more information about math expressions [here](#).

#### 2.3 Footnotes

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

---

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

## 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 \(LCM\)](#).

The [Typst](#) language is specially suitable for documents that include [Mathematics](#). [Formulas](#) are rendered properly as the Typst syntax is designed to be easy to understand and use.

This glossary is powered by the [glossarium](#) package. Check more about it there.

## 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.

The index is powered by the [in-dexter](#) package. Check more about it there.

## **Chapter 3**

### **The problem and its challenges**

The problem and its challenges.

#### **3.1 Images**

Example of inserting an image as displayed text,



or as a figure:

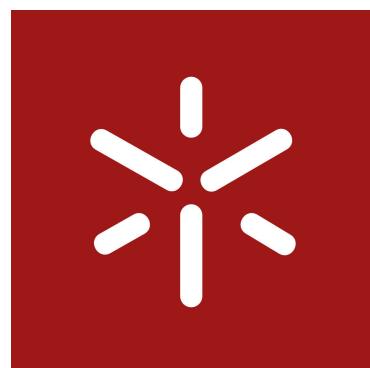


Figure 1: Logo of the University of Minho

## **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**

Applications of the 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 Future work**

## Chapter 7

### Planned Schedule

#### 7.1 Activities

Task	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Background and <a href="#">SOA</a>	•	•	•							
<a href="#">PDR</a> preparation		•	•	•						
Contribution			•	•	•	•	•	•	•	•
Writing up							•	•	•	•

Table 1: Planned Schedule

For more elegant visualisation check some community-made packages like [gantty](#) or [timeliney](#).

## Bibliography

- [1] “The Rust Programming Language.” [Online]. Available: <https://doc.rust-lang.org/book/>
- [2] B.W. Kernighan and D.M. Ritchie, The C Programming Language (ANSI C), 2nd ed. Prentice Hall Software series.
- [3] R. Bird and P. Wadler, “Introduction to Functional Programming.”
- [4] “Typst Documentation.” [Online]. Available: <https://typst.app/docs/>

# **Index**

## **G**

Generate 4

## **I**

Index 4

    Nested 4

## **K**

Keywords 4

## **O**

Others 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.

```
factorial :: Integer -> Integer
factorial 0 = 1
factorial n = n * factorial (n-1)
```

Listing 1: Factorial function

## **Appendix D**

### **Tooling**

(Should this be the case)

Anyone using [LaTeX](#) should start using [Typst](#).



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