English Thesis Title

Deutscher Titel der Arbeit

Dem Promotionszentrum Angewandte Informatik des Verbunds

Hochschule für Angewandte Wissenschaften München Technische Hochschule Nürnberg Georg Simon Ohm Ostbayerische Technische Hochschule Regensburg

> zur Erlangung des akademischen Grades Doktor der Ingenieurwissenschaften (Dr.-Ing.)

> > vorgelegt von Max Mustermann

geboren am dd.mm.yyyy in Musterstadt

Tag der mündlichen Prüfung:

dd.mm.yyyy Prof. Dr. Vorname Nachname Gutachter: Prof. Dr. Vorname Nachname

Acknowledgments

A number of people supported and accompanied me on this long journey to finish this thesis, and I would like to take the chance to thank them for their patience and effort.

 ${\it Lorem~ipsum~dolores...}$

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Chapter 1

Introduction

This document uses several abbreviations, including the Global Positioning System (GPS), Application Programming Interface (API), and Random Access Memory (RAM).

The GPS is a satellite-based navigation system, the API is a set of tools for building software applications, and RAM is a type of computer memory.

1.1 Citations

Details about citations are in Section 1.1. This is a citation [Wag+24]. Here is a textual citation that shows the author's name: Wagner et al. [Wag+24]. Here is an author-only citation: Wagner et al. did something useful. You can also specify page numbers and extra info [see Wag+24, p. 5].

This is an example of multiple citations [Boc+14; Boc+13; Boc+09].

1.2 URLs

Click here to open example.com. You can change the urlcolor configuration in the preamble if you prefer a different URL color.

1.3 Tables

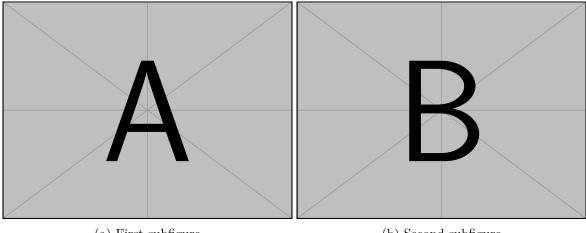
As shown in Table 1.1, the data is easy to understand.

Column 1	Column 2	Column 3
Apple	10	\$1.00
Banana	5	\$0.50
Cherry	20	\$3.00
Total	35	\$4.50

Table 1.1: An example table using the booktabs package.

1.4 Figures

The subcaption package provides support for adding subfigures or subtables within a figure or table environment. This is particularly useful when you want to include multiple images, plots, or tables as part of a larger group, each with its own label and caption. This is a reference to Fig. 1.1.



(a) First subfigure

(b) Second subfigure

Figure 1.1: Main figure caption describing both subfigures.

1.5 Listings

Listing 1.1 is a listing:

```
import sympy as sp
2
   def approaching_zero(epsilon=1e-10):
3
4
       Calculates the limit of 1/x as x approaches zero from the positive side.
5
6
7
       x = sp.Symbol('x', real=True, positive=True)
8
       limit_expr = 1 / x
       # Calculate the limit
10
       limit_result = sp.limit(limit_expr, x, epsilon)
11
12
       if limit_result == sp.oo:
13
           return "As x approaches zero, 1/x approaches... infinity! (wow!)"
14
       elif limit_result == -sp.oo:
15
           return "Wait, how did we get negative infinity?"
16
17
           return f"The limit is {limit_result}."
18
19
   print(approaching_zero())
```

Listing 1.1: Example

Algorithms 1.6

This is an algorithm:

1.6. ALGORITHMS 3

Algorithm 1 Approaching Zero

```
Require: Epsilon (\epsilon) \leftarrow 1 \times 10^{-10}
 1: Define a symbol x such that x > 0
```

- 2: Define the expression $L \leftarrow \frac{1}{x}$ 3: Compute the limit as $x \to \epsilon$: limit_result \leftarrow limit(L, x, ϵ)
- 4: **if** $limit_result = \infty$ **then**
- Return "As x approaches zero, 1/x approaches infinity!" 5:
- 6: else if $limit_result = -\infty$ then
- Return "Wait, how did we get negative infinity?" 7:
- 8: **else**
- Return "The limit is limit_result. That was unexpected!" 9:

Chapter 2

Theoretical Background

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

This is the second paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

And after the second paragraph follows the third paragraph. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

After this fourth paragraph, we start a new paragraph sequence. Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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Appendix A

Supplemental Information

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Acronyms

 \mathbf{API} Application Programming Interface. 1

 ${\bf GPS}\,$ Global Positioning System. 1

 ${\bf RAM}\,$ Random Access Memory. 1

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Bibliography

- [Boc+09] T. Bocklet, A. Maier, K. Riedhammer, and E. Nöth. "Towards a Language-independent Intelligibility Assessment of Children with Cleft Lip and Palate". In: *Proc. ISCA Workshop on Child, Computer and Interaction (WOCCI)*. 2009, pp. 2015–2018.
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