Chair of Integrated Systems
Department of Electrical and Computer Engineering
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# Design and Implementation of an Intuitive and Flexible Hardware Accelerator for an Arbitrary Application

**Master thesis**

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|---|---|
| Author: | Firstname Familyname |
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| Submission date: | October 24, 2022 |

# Abstract

An abstract is defined as an abbreviated accurate representation of the contents of a document. – American National Standards Institute (ANSI)

# Contents

# List of Figures

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# 1 Introduction

Reading this section should give the reader a understanding why he or she should read your thesis and what he or she can expect from it. The section should include the following parts.

**Motivation** What problem lead to the thesis? What's the context? What are the challenges?

**State of the art** What have others done to solve a similar problem? (keep this short, more to come in the following chapter)

**Goal of this thesis** Be as specific and measurable as possible.

**Steps required to reach this goal** Which steps are included in your thesis and are part of your task? Which are not?

**Your Method** How will your reach those goals? Usually, this is equal to an outline of the following chapters.

# 2 Related Work

Include only work that is addressing the same or a very similar goal as yours. First, explain what the other authors did in their work in your own words. Then discuss why you solved the same problem differently.

# 3 Approach

The main part of your thesis. Here you describe your approach to solve the problem you stated in the Introduction. Be as general as possible.

# 4 (Prototype) Implementation

In many cases, you implemented your approach in some way. In this chapter, you explain your implementation. Usually you can't explain every detail. The source code that you submit already contains the tiny details of your implementation: you can skip them in the description. Instead, focus on what was hard why you implemented it in a particular way, not how you implemented it

# 5 Evaluation

Using the previously presented implementation, you can now evaluate your approach.
Get as many quantitative measurements as possible. E.g. compare different implementations in terms of hardware usage, latency...
This chapter is usually filled with graphs and numbers. In the end, the numbers should show how your approach is better (in some regard) than existing approaches.

# 6 Conclusion and Outlook

**Conclude** Summarize the work you did. Show how well you reached the goal you specified in the introduction.

**Outlook** Which new questions arise based on your results? If you would continue to work on this topic, what would your next work item be?

# Bibliography

## Confirmation

Herewith I, Firstname Familyname, confirm that I independently prepared this work. No further references or auxiliary means except those declared in this document have been used.

Munich, October 24, 2022

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Firstname Familyname