



Faculty of Computer Science, Electrical Engineering and Mathematics Department of  
Computer Science

# An LLVM based toolchain for transparent acceleration of digital image processing applications using FPGA overlay architectures

*Master Thesis*

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EMPTY version

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# Abstract

THIS IS MY ABSTRACT

# Declaration

I hereby declare that I prepared this thesis entirely on my own and have not used outside sources without declaration in the text. Any concepts or quotations applicable to these sources are clearly attributed to them. This thesis has not been submitted in the same or substantially similar version, not even in part, to any other authority for grading and has not been published elsewhere.

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Paderborn, 6.7.2015

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Lukas Funke

# Preface

Please write all your preface text here. If you do so, don't forget to thank your supervisor, other committee members, your family, colleagues etc. etc.



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# Listings



# Chapter 1

## Introduction





## Chapter 2

# Preliminaries

This template has been used to publish the thesis of Buijs [1] and is originally used for the thesis of Nugteren [2].

One of the best resources for  $\text{\LaTeX}$  basics, and advanced constructs, is the  $\text{\LaTeX}$  wikibook<sup>1</sup>. Of course colleagues and a good internet search using your favorite search engine can do wonders if you're stuck.

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<sup>1</sup>To be found at <http://en.wikibooks.org/wiki/LaTeX/>



## Chapter 3

# First Real Chapter

This is the first real chapter, this depends on your thesis structure.



## Chapter 4

# Converting LLVM programs to a canonical form

**Definition 1.** An *assignment* is the root node of an expression tree where the left hand side is either a write-memory operation or a return.



## Chapter 5

# Conclusions

Write your conclusions here.





# Bibliography

- [1] J.C.A.M. Buijs. Mapping Data Sources to XES in a Generic Way. Master's thesis, Eindhoven University of Technology, 2010. 3
- [2] G.M. Nugteren. Process Model Simplification. Master's thesis, Eindhoven University of Technology, 2010. 3



## Appendix A

# My First Appendix

In this file (appendices/main.tex) you can add appendix chapters, just as you did in the thesis.tex file for the ‘normal’ chapters. You can also choose to include everything in this single file, whatever you prefer.