

DEPARTMENT OF INFORMATION TECHNOLOGY AND
ELECTRICAL ENGINEERING

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L^AT_EX Report Template

Semester Project / Master Project

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Acknowledgements

Ceci est un test de mon script

Abstract

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Declaration of Originality

I hereby confirm that I am the sole author of the written work here enclosed and that I have compiled it in my own words. Parts excepted are corrections of form and content by the supervisor. For a detailed version of the declaration of originality, please refer to Appendix ??

Pierre-Hugues BLELLY,
Zurich, May 2020

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List of Acronyms

AES	Advanced Encryption Standard
ASIC	Application-Specific Integrated Circuit
DES	Data Encryption Standard
DVI	Device Independent File Format
ECC	Elliptic Curve Cryptography
ECDSA	Elliptic Curve Digital Signature Algorithm
EPS	Encapsulated PostScript
FPGA	Field Programmable Gate Array
IC	Integrated Circuit
IIS	Integrated Systems Laboratory
LED	Light-Emitting Diode
NIST	National Institute of Standards and Technology
PDF	Portable Document Format
WYSIWYG	What You See Is What You Get

Chapter 1

Introduction

1.1 Heterogeneous systems

1.2 Design Issue with heterogeneous systems

1.3 Currently Available Workflow for Halide

1.4 Image processing and why Halide may be interesting

Chapter 2

Preliminaries / Background

2.1 Hero

2.2 Halide Language

2.2.1 Programing model

2.2.2 Available Functionnalities

2.2.3 Porting Halide to new Platforms

2.3 Compilation Workflow

Chapter 3

Design Implementation

3.1 Matrix Multiplication

3.2 Schedule Implementation

Chapter 4

Results

4.1 Test Setup

4.2 Comparaison between OpenMp and Halide on the different platforms

Chapter 5

Conclusion and Future Work

Draw your conclusions from the results you achieved and summarize your contributions. Comparisons (e.g., of hardware figures) with related work are also appropriate here. Point out things that could or need to be investigated further.

5.1 First Section

5.2 Second Section

Glossary

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