Technical University of Crete

Diploma Thesis

Design and Implementation of an FPGA-Based Convolutional Neural Network Accelerator

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TECHNICAL UNIVERSITY OF CRETE

Abstract

School of Electrical and Computer Engineering

Electrical and Computer Engineer

Design and Implementation of an FPGA-Based Convolutional Neural Network Accelerator

by Christos SPYRIDAKIS

The Thesis Abstract is written here (and usually kept to just this page). The page is kept centered vertically so can expand into the blank space above the title too...

Acknowledgements

The acknowledgments and the people to thank go here, don't forget to include your project advisor...

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Physical Constants

Speed of Light	$c_0 = 2.997\,924\,58 \times 10^8\,\mathrm{m\,s^{-1}}$ (exact)
Constant Name	$Symbol = ConstantValue$ with units

List of Symbols

Symbol	Name	Unit
a	distance	m
P	power	W ($\mathrm{J\,s^{-1}}$)
ω	angular frequency	rad

List of Abbreviations

MCU **M**icro**C**ontroller **U**nit
MPU **M**icro**P**rocessor **U**nit

Dedicated to those people who have helped me be the person I am today...

Chapter 1

Introduction

TODO

1.1 Motivation

TODO

1.2 Scientific Goals and Contributions

TODO

1.3 Thesis Outline

TODO

- **Chapter 2 - Theoretical Background:**
- **Chapter 3 - Related Work:**
- **Chapter 4 - Design Features and Implementation:**
- **Chapter 5 - Applications and Usage Examples:**
- **Chapter 6 - Results:**
- **Chapter 7 - Conclusions and Future Work:**

Chapter 2

Theoretical Background

”Let no one ignorant of geometry enter”

Plato

Chapter 3

Related Work

Chapter 4

Design Features and Implementation

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Chapter 5

Applications and Usage Examples

Chapter 6

Results

Chapter 7

Conclusions and Future Work