

TECHNICAL UNIVERSITY OF CRETE

DIPLOMA THESIS

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

Author:

Christos SPYRIDAKIS

Thesis Committee:

Prof. Apostolos DOLLAS(Supervisor)

Asst. Prof. Eftychios KOUTROULIS

Asst. Prof. Panagiotis PARTSINEVELOS



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

List of Symbols

a	distance	m
P	power	W (J s ⁻¹)
Symbol	Name	Unit
ω	angular frequency	rad

List of Abbreviations

ALU Arithmetic Logic Unit

Dedicated to my family and friends. . .

Chapter 1

Chapter Title Here

1.1 Main Section 1

"Let no one ignorant of
geometry enter"

Plato

DoReFa-Net [1] fdg.

In this Chapter, we describe in detail the theoretical background of Machine Learning and especially for CNN.

[2]

1.1.1 Subsection 1

Nunc posuere quam at lectus tristique eu ultrices augue venenatis. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Aliquam erat volutpat. Vivamus sodales tortor eget quam adipiscing in vulputate ante ullamcorper. Sed eros ante, lacinia et sollicitudin et, aliquam sit amet augue. In hac habitasse platea dictumst. Hello

1.1.2 Subsection 2

Morbi rutrum odio eget arcu adipiscing sodales. Aenean et purus a est pulvinar pellentesque. Cras in elit neque, quis varius elit. Phasellus fringilla, nibh eu tempus venenatis, dolor elit posuere quam, quis adipiscing urna leo nec orci. Sed nec nulla auctor odio aliquet consequat. Ut nec nulla in ante ullamcorper aliquam at sed dolor. Phasellus fermentum magna in augue gravida cursus. Cras sed

pretium lorem. Pellentesque eget ornare odio. Proin accumsan, massa viverra cursus pharetra, ipsum nisi lobortis velit, a malesuada dolor lorem eu neque.

1.2 Main Section 2

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Appendix A

Frequently Asked Questions

A.1 How do I change the colors of links?

The color of links can be changed to your liking using:

```
\hypersetup{urlcolor=red}, or
```

```
\hypersetup{citecolor=green}, or
```

```
\hypersetup{allcolor=blue}.
```

If you want to completely hide the links, you can use:

```
\hypersetup{allcolors=.}, or even better:
```

```
\hypersetup{hidelinks}.
```

If you want to have obvious links in the PDF but not the printed text, use:

```
\hypersetup{colorlinks=false}.
```


References

- [1] Name. “Test”. In: *Jo* 72.1 (Jan. 111), pp. 11–11. URL: <http://google.com>.

External Links

[2] *Wikipedia*. URL: <https://www.wikipedia.com/>.