

Vrije Universiteit Amsterdam



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Master Thesis

GPU energy efficiency

An analysis of energy consumption, usage patterns and energy saving strategies

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“I am the master of my fate, I am the captain of my soul”
from Invictus, by William Ernest Henley

Abstract

Here goes the abstract of this thesis.

To ...

Acknowledgements

TODO Graphics Processing Unit (GPU) (1)

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Introduction

1.1 Context

TODO

1.2 Objective

TODO

1.3 Research Question

TODO

1.4 Research Method

TODO

2

Background

This chapter outlines some of the research that is relevant to the topic of GPU energy conservation.

2.1 Literature Study

In this section we first provide a description of the process by which literature was collected for the purpose of this study to ensure its replicability.

2.2 Measuring Energy Consumption

TODO

2.2.1 Statistical Analysis

TODO

2.3 Usage Patterns

TODO

2.4 Energy Saving Strategies

TODO

2.4.1 DVFS

TODO

3

Usage Patterns

TODO

4

Energy Saving Strategies

TODO

5

Dynamic Energy Saving

TODO

6

Discussions

TODO

7

Conclusion

TODO

Appendix A

TODO

References

- [1] NELLY CONDORI-FERNANDEZ AND PATRICIA LAGO. **Characterizing the contribution of quality requirements to software sustainability.** *Journal of Systems and Software*, **137**:289–305, 3 2018. ii

Statement of Originality

This document is written by Student Quincy Bakker who declares to take full responsibility for the contents of this document.

I declare that the text and the work presented in this document are original and that no sources other than those mentioned in the text and its references have been used in creating it.

The Faculty of Science is responsible solely for the supervision of completion of the work, not for the contents.