



**KTH Computer Science
and Communication**

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DEXTER GRAMFORS

Master's Thesis at NADA
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Abstract

This is a skeleton for KTH theses. More documentation regarding the KTH thesis class file can be found in the package documentation.

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Chapter 1

Introduction

- 1.1 Area of interest/background**
- 1.2 Problem statement**
- 1.3 Research question**
- 1.4 Objective**
- 1.5 Motivation**
- 1.6 Delimitations**

Chapter 2

Background

Purpose of chapter, TODO

2.1 Processor architectures

2.2 Calculating parallel speedup

2.2.1 Amdahl's law

2.2.2 Expanding Amdahl's law

2.3 Python performance and parallel capabilities

2.3.1 Performance

2.3.2 The GIL, Global Interpreter Lock

2.3.3 Threading

2.3.4 Multiprocessing

2.4 Related work

Chapter 3

Method

Purpose of chapter, TODO

3.1 Program/data analysis

3.2 Dependency graph generation

3.3 Parallelization

3.3.1 Multiprocessing

3.3.2 Threading

3.4 Evaluation

Chapter 4

Results

These are the results.

Chapter 5

Discussion

A discussion.

Bibliography

- [1] Viktor Leis et al. “How good are query optimizers, really?” In: *Proceedings of the VLDB Endowment* 9.3 (2015), pp. 204–215. URL: <http://dl.acm.org/citation.cfm?id=2850594> (visited on 01/21/2016).

Appendix A

RDF

And here is a figure

Figure A.1. Several statements describing the same resource.

that we refer to here: A.1