



**School of Computer Science and Engineering**

**Faculty of Engineering**

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# **Exploring Just-in-Time Compilation in Relational Database Engines**

by

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# Abstract

# Abbreviations

**ACID** Atomicity, consistency, isolation, durability

**CPU** Central Processing Unit

**DB** Database

**EXP** Expression (expressions inside queries)

**IR** Intermediate Representation

**JIT** Just-in-time (compiler)

**JVM** Java Virtual Machine

**LLC** Last Level Cache

**MLIR** Multi-Level Intermediate Representation

**QEP** Query Execution Plan

**RA** Relational Algebra

**SQL** Structured Query Language

**SSD** Solid State Drive

**TPC-H** Transaction Processing Performance Council

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Example Citation and Figure . . . . .	1
1.1.1	Including Figures . . . . .	1
<b>2</b>	<b>Background</b>	<b>3</b>
<b>3</b>	<b>Project</b>	<b>4</b>
	<b>Conclusion</b>	<b>5</b>
	<b>Bibliography</b>	<b>6</b>

# List of Figures

1.1	Example black figure . . . . .	1
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# Chapter 1

## Introduction

### 1.1 Example Citation and Figure

This is an example of how to make a citation. You can cite papers like this [SJ20]. You can also cite multiple sources [SJ20, AW21].

#### 1.1.1 Including Figures

Here is an example of how to include a figure in your report:



Figure 1.1: Example black figure

You can reference the figure in text like this: See Figure 1.1.



## Chapter 2

# Background

Lorem Ipsum yay

## Chapter 3

# Project

Lorem Ipsum

# Conclusion

Lorem Ipsum

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# Bibliography

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