UNIVERSITY OF SOMETHING
THE GRADUATE SCHOOL
SOME DEPARTMENT

My Thesis Title

This is my subtitle

PHD THESIS

ALBERT EINSTEIN

Supervisor: George Washington
Professor

— DRAFT COPY v.2.1. —

New York, February 2015

Aesop

University of Something
The Graduate School
Some Department

My Thesis Title

This is my subtitle

PhD Thesis

ALBERT EINSTEIN

Supervisor: George Washington
Professor

Approved by ... November 22, 2010.

(Signature)	*(Signature)*	*(Signature)*
.....	.....	.....
George Washington	Professor A	Professor B
Professor	Professor	Professor

New York, February 2015

University of Something
The Graduate School
Some Department

Some Statement
And another one ...

(Signature)

.....
Albert Einstein

Abstract

A peer-to-peer system is a set of autonomous computing nodes (the peers) which cooperate in order to exchange data. The peers in the peer-to-peer systems that are widely used today, rely on simple keyword selection in order to search for data. The need for richer facilities in exchanging data, as well as, the evolution of the Semantic Web, led to the evolution of the schema-based peer-to-peer systems. In those systems every node uses a schema to organize the local data. So there are two ways in order for data search to be feasible. The first but not so flexible way implies that every node uses the same schema. The second way gives every node the flexibility to choose a schema according with its needs, but on the same time requires the existence of mapping rules in order for queries to be replied. This way though, doesn't offer automatic creation and dynamic renewal of the mapping rules which would be essential for peer-to-peer systems.

This diploma thesis aims to the development of a schema-based peer-to-peer system that allows a certain flexibility for schema selection and on the same time enables query transformation without the use of mapping rules. The peers use RDF schemas that are subsets (views) of a big common schema called global schema.

Keywords

Peer-to-peer, Schema-based peer-to-peer, Semantic Web, RDF/S, RQL, Jxta

to my parents

Acknowledgements

I would like to thank ...

New York, May 2020

Albert Einstein

Contents

List of Figures

List of Illustrations

List of Tables

Preface

Preface goes here ...

Chapter 1

Introduction

This is my Introduction ... [1]

Part I

Part A

Chapter 2

Background

This is another chapter ...

Part II

Part B

Chapter 3

Background

This is another chapter ...

Part III

Part C

Chapter 4

Background

This is another chapter ...

Appendices

Appendix A

Test Appendix

A.1 First Section

...

Appendix B

Figures

```
\begin{figure}[!ht]
    \centering
    \includegraphics{figures/2.png}
    \caption{NOR gate.}
    \label{figureB.1}
\end{figure}
```

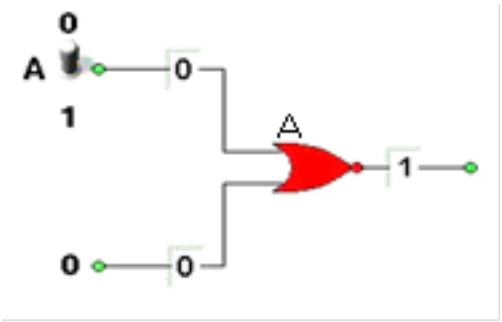

Figure B.1: *NOR gate.*

Appendix C

Tables

```
\begin{table}[h!]
	\centering
	\caption{My table.}
	\begin{tabular}{|c|c|}
		\hline
		\textbf{A} & \textbf{B} \\
		\hline\hline
		a11 &  a12 \\
		\hline
		a21 &  a22 \\
		\hline
	\end{tabular}
	\label{table01}
\end{table}
```

Table C.1: *My table.*

A	**B**
a11	a12
a21	a22

Appendix D

Index Generation

```
\index{xerox} \index{babel} \index{anna} \index{babylon}
```

Appendix E

Illustrations

```
\begin{Illustration}[!h]
      \centering
      \includegraphics[width=0.5\textwidth]{figures/frog.jpg}
      \caption{frog}
      \label{frog_image}
\end{Illustration}
```

Illustration E.1: *frog*

Bibliography

[1] S. R. Nassif, "Design for variability in DSM technologies," in *Proc. IEEE 1st Int. Symp. Quality Electron. Des. (ISQED)*, San Jose, CA, USA, Mar. 2000, pp. 451–454.

Abbreviations

BPF	Band Pass Filter

Glossary

term	*description*
female	girl
male	boy

Index