University of Something
The Graduate School
Some Department

My Thesis Title

This is my subtitle

PhD Thesis

ALBERT EINSTEIN

Supervisor: George Washington
Professor

New York, February 2015

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Approved by ... November 22, 2010.

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

New York, February 2015

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Some Statement
And another one ...

(Signature)

.....
Albert Einstein

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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

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to my parents

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Acknowledgements

I would like to thank ...

New York, May 2020

Albert Einstein

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Contents

List of Figures

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Preface

Preface goes here ...

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Chapter 1: Introduction

This is my Introduction ... [1]

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I

Part A

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Contents

2.1 section1

2.1.1 sub-section 1

2.2 section 2

This is another chapter ...

ALGORITHM 2.1: How to write algorithms

Data: this text
Result: how to write algorithm with LaTeX2e
initialization **while** *not at end of this document* **do**
  read current **if** *understand* **then**
    go to next section current section becomes this one
  else
    go back to the beginning of current section
  end
end

ALGORITHM 2.2: An algorithm

if *if condition* **then**
  | something if
else if *elseif condition* **then**
  | something elseif
else
  | something else
end

blah blah

II

Part B

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Chapter 3: Background

Contents

3.1 section 3.1

3.1.1 sub-section 3.1.1

3.2 section 3.2

This is another chapter ...

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III

Part C

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Chapter 4: Background

This is another chapter ...

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Chapter 5: Background

Contents

5.1 section 5.1

5.1.1 sub-section 5.1.1

5.2 section 5.2

This is another chapter ...

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Appendices

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Appendix A: Test Appendix

A.1 First Section

...

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

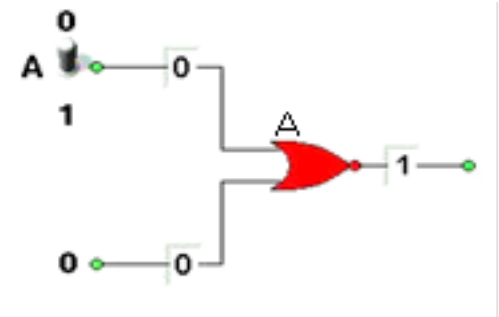

Figure B.1: *NOR gate.*

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```
\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

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

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

Illustration E.1: *frog*

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Algorithms are typeset using the `algorithm2e` package.

Code for floating algorithms:

```
\begin{algorithm}[tb]
    \caption{A floating algorithm}
    \begin{algorithm2e}[H]
      \uIf{if condition}{
          something if \;
          solved \;
      }
      \uElseIf{elseif condition}{
          something elseif \;
      }
      \Else{
          something else \;
      }
   \end{algorithm2e}
\end{algorithm}
```


ALGORITHM F.1: A floating algorithm

if *if condition* **then**
  something if ;
  solved ;
else if *elseif condition* **then**
  something elseif ;
else
  something else ;
end

For inline algorithms use the "H" option for both `algorithm` and `algorithm2e` environments:

```
\begin{algorithm}[H]
    \caption{An "inline" algorithm}
    \begin{algorithm2e}[H]
      \uIf{if condition}{
          something if \;
          solved \;
      }
      \uElseIf{elseif condition}{
          something elseif \;
      }
      \Else{
          something else \;
      }
   \end{algorithm2e}
\end{algorithm}
```

ALGORITHM F.2: An "inline" algorithm

if *if condition* **then**
  something if ;
  solved ;
else if *elseif condition* **then**
  something elseif ;
else
  something else ;
end

(and the paragraph continues here ...)

Of course one might prefer a plain inline presentation:

```
\begin{algorithm2e}[H]
    \uIf{if condition}{
        something if \;
        solved \;
    }
    \uElseIf{elseif condition}{
        something elseif \;
    }
    \Else{
        something else \;
    }
\end{algorithm2e}
```

Text starts here ...
if *if condition* **then**
  something if ;
  solved ;
else if *elseif condition* **then**
  something elseif ;
else
  something else ;
end
... and continues here.

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[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.

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BPF	Band Pass Filter

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term	*description*
female	girl
male	boy

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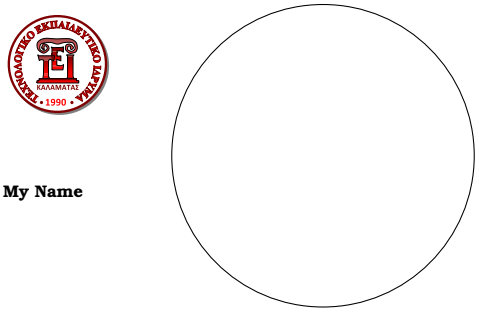

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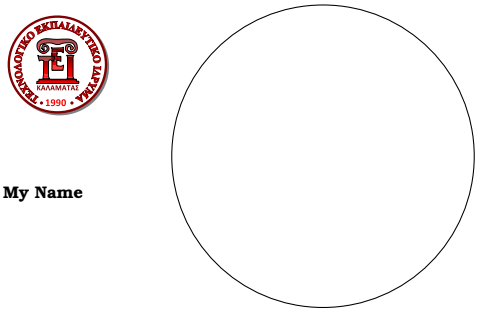

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