DISSERTATION THESIS TITLE

by

YOUR NAME

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Supervisor:

prof. PETER SUPERVISOR, Ph.D.
Department of Theoretical Computer Science
Faculty of Information Technology
Czech Technical University in Prague
Thákurova 9
160 00 Prague 6
Czech Republic

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Abstract and contributions

This dissertation thesis deals with . . .

In particular, the main contributions of the dissertation thesis are as follows:

1. Design of a methodology of a . . .
2. . .
3. . .

Keywords:
keyword1, keyword2, keyword3, keyword4, keyword5.
Abstrakt v českém jazyce je povinnou součástí práce.

Klíčová slova:
- klíčové slovo 1, klíčové slovo 2.
Acknowledgements

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Finally, my greatest thanks go to my family members, for their infinite patience and care . . .
Dedication

...
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Abbreviations

Number Sets

N  Natural numbers set
N₀  Natural numbers set ∪ {0}
Z  Integer numbers set
Zₘ  Least nonzero residue number set with a module of m
Sₘ  Symmetric residue number set with a module of m
Q  Rational numbers set
Fₜ  Floating point numbers set with a precision of t
R  Real numbers set

Common Mathematical Functions and Operators

1₀₂  Numbers’ radices are designated with a subscript
b  Vector b
bᵢ  the i th element of vector b
∥b∥  Norm of vector b
dim b  Dimension of vector b
A  Matrix A
aᵢ,ⱼ  Element of matrix A at the i th row, and the j th column
A⁻¹  Inverse matrix to matrix A
Aᵀ  Transposed matrix to matrix A
∥A∥  Norm of matrix A
cond A  Condition number of matrix A
rank A  Rank of matrix A — how many independent rows/columns it has
max {a, b}  Maximum of a and b, a when a ≥ b, b when a < b
min {a, b}  Minimum of a and b, a when a ≤ b, b when a > b
O(x)  The big O notation
Θ(x)  The big Θ notation
Mathematical Terminology

\[ Q \text{ Number of prime number modules} \]
\[ M \text{ A product of individual modules } M = \prod_{i=1}^{Q} m_i \]

... ...
... ...
... ...
... ...

Miscellaneous Abbreviations

**FPU** Floating Point Unit

... ...
... ...
... ...
... ...
... ...
In this chapter, we...

1.1 Motivation

... [A.2] ...

1.2 Problem Statement

Brief description of the topic of the dissertation thesis. A complete explanation of the topic shall be described within chapter 2 at page 3.

1.3 Related Work/Previous Results

1.4 Goals of the Dissertation Thesis

1. ...

2. ...

3. ...

1.5 Structure of the Dissertation Thesis

The thesis is organized into ... chapters as follows:

1. Introduction: Describes the motivation behind our efforts together with our goals. There is also a list of contributions of this dissertation thesis.
1. **Introduction**

2. *Background and State-of-the-Art:* Introduces the reader to the necessary theoretical background and surveys the current state-of-the-art.

3. *Overview of Our Approach:* ...

4. *Main Results:* ...

5. *Conclusions:* Summarizes the results of our research, suggests possible topics for further research, and concludes the thesis.
Background and State-of-the-Art

...  

2.1 Theoretical Background  

2.2 Previous Results and Related Work
Overview of Our Approach

The sample Fig. 3.1 shows . . .

Figure 3.1: Distribution of the floating point numbers. This figure shows a distribution of a sample floating point number set with a precision $t = 3$, and $e_{\text{min}} = -1$ and $e_{\text{max}} = 3$.

There are two basic floating point data types, as defined by the IEEE 754-2008 standard, are shown in Tab. 3.1.

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Table 3.1: Basic floating point data types.
4.1 Main Result 1

4.2 Main Result 2

4.3 Main Result 3

Theorem 4.3.1. Some theorem.

Proof. Its proof.

Corollary 4.3.2. The corollary is.

4.4 Discussion

4.5 Summary
Chapter 5

Conclusions

5.1 Summary

5.2 Contributions of the Dissertation Thesis

5.3 Future Work

The author of the dissertation thesis suggests to explore the following:

- It would be interesting to . . .
- Consider . . .
- The implementation of our methodology could be further improved . . .
- Apply the . . .
- . . .
Reviewed Publications of the Author Relevant to the Thesis


The paper has been cited in:

Remaining Publications of the Author Relevant to the Thesis


The paper has been cited in:

- Léfèvre, Č. *Le Château des Carpathes : Le fin alternatif découvert !*, . . .
- Q. Mañana. . .
- H. Erdős. . .
- Å. Sørenson. . .
Appendix A

Some appendix

A.1 . . .

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