

University of Warsaw
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Title in English

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in COMPUTATIONAL ENGINEERING**

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Abstract

Here an abstract will show up in some months to follow.

Keywords

quantum annealing, D-Wave

Thesis domain (Socrates-Erasmus subject area codes)

11.2 Statystyka

Subject classification

D. Software

D.127. Blabalgorithms

D.127.6. Numerical blabalysis

Tytuł pracy w języku polskim

Tytuł po polsku

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Introduction

Chapter 1

Current state of Quantum Computing

1.1. Gate model

Some text about the gate model computers

1.1.1. Error correction

Some for subsection of error correction

1.2. Problems of practical QC - NISQ

Some text about NISQ

1.3. Quantum Annealing

Quantum annealing has some interesting properties. It is analog in nature and because the computation happens in a ground state it is unaffected by decoherence McGeoch. [1]

Chapter 2

What actually is Quantum Annealing

2.1. Thermal Annealing

2.2. Simulated Annealing

2.3. Quantum Annealing

Chapter 3

The problem

Chapter 4

Practical realization of The problem

Chapter 5

Conclusions and remarks

Chapter 6

Notebook

Ocean toolkit is the software suite currently used by DWave to solve computational problems. It consists of various submodules, each aimed at different stage of the process. The toolkit is freely available on Github [DWGit](#)Hub.

Bibliography

- [1] Catherine C. McGeoch. *Adiabatic Quantum Computation and Quantum Annealing - Theory and Practice*. Morgan Claypool Publishers, 2014.