Kun WANG

CURRICULUM VITAE

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Personal Information

Gender Male

Date of Birth June 20, 1990

Nationality China

Homepage www.quantumman.me

EDUCATION

2013.9 - present Ph.D. in Computer Science, Department of Computer Science, Nanjing University 2009.9 - 2013.6 B.S. in Computer Science, Department of Computer Science, Nanjing University

AWARDS

2015 Outstanding Cadre of the Communist Youth League of Nanjing University

2014 Scholarship for Doctoral Studies by the Hasso Plattner Institute

2012 Nanjing University Elite Scholarship

2012 Outstanding Student of Nanjing University

2011 Nanjing University Elite Scholarship

2011 The SHKP-Kwoks' Foundation Scholarship

2010 National Scholarship for Encouragement

Research Interests

Dominating Quantum algorithms, quantum computational models, quantum computational com-

plexity

Secondary Quantum information, quantum programming language

Research Papers

NCTCS2015 Kun Wang, Nan Wu, and Fangmin Song. On Four Non-Computable Decision Prob-

lems. National Conference on Theoretical Computer Science, 2015. Submission suc-

ceed, reviewing.

QIC2015 Nan Wu, **Kun Wang**, Haixing Hu, Fangmin Song and Xiangdong Li. *A Novel Quantum*

Random Number Generation Algorithm Used by Smartphone Camera. Proc. SPIE 9500, Quantum Information and Computation XIII, 2015. Baltimore, Maryland, United

States.

RESEARCH EXPERIENCE

Feb 2015 <u>- Ju</u>n 2015

Introduction to Computation Theory, *Department of Computer Science*, Kun Wang, Teaching Assistant.

An introductory course on computation models (recursive functions, lambda calculus, Turing machine, etc.) by professor Fangmin Song. I was responsible for exercise courses. I implemented a Turing machine simulator for better understanding the model, hosted in Github.

Sep <u>2013</u>

Applying Linear Waveguide Array to implement Quantum Walk algorithms, *National Natural Science Foundation of China*, Prof. Dr. Fangmin Song and Prof. Dr. Shining Zhu, Participant.

A project on the theories and technologies of applying Linear Waveguide Array to implement Quantum algorithms based on Quantum Walks.

Feb 2013 - Jun 2013

Introduction to C Programming, *Institute for International Students*, Kun Wang, Instructor.

An introductory course on C programming language for the exchange students from France. I was the instructor for both lectures and practices.

May 2012

Quantum Computational Model Transformation System based on Categorical Quantum Mechanics, Nanjing University Undergraduate Innovation Program, Kun Wang, Leader.

We apply a high-level algebra - Categorical Quantum Mechanics - to formally describe two Quantum Computational models: Quantum Turing Machine and Quantum Circuit Model, then figure out the key similarities and differences between them. After that, we transform algorithms realized on one model to corresponding algorithms on another.

TECHNICAL SKILLS

Programming Language C, C++, Java, Verilog, Markdown Word Processing Vim, Tex, Sublime Text

Self-Learning Ability Category Theory, Linear Algebra, *Development* Visual Studio, Eclipse, Quartus II, Git Quantum Mechanics, Symbolic Logic *Tools*