# Kun WANG

CURRICULUM VITAE

(+86) 15996290849
⋈ nju.wangkun@gmail.com
Room 324, Computer Science Building Nanjing University, Xianlin Campus Nanjing 210023, China



## PERSONAL INFORMATION

Gender Male

Date of Birth June 20, 1990

Nationality China

Homepage kun-wang.github.io

#### **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*, Wang Kun, Teaching Assistant.

An introductory course on computation models (recursive functions, lambda calculus, Turing machine, etc.) by professor Song Fangmin. 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. Song Fangmin and Prof. Dr. Zhu Shining, Participant.

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

Feb 2013 <u>- Ju</u>n 2013

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

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

May <u>2012</u>

Quantum Computational Model Transformation System based on Categorical Quantum Mechanics, Nanjing University Undergraduate Innovation Program, Wang Kun, 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  ${\sf C,\ C++,\ Java,\ Verilog,\ Markdown} \quad \textit{Word\ Processing} \quad {\sf Vim,\ Tex,\ Sublime\ Text}$ 

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