

Chunhao Wang

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Education

- 2013–Present **Ph.D. (in progress)**, *University of Waterloo*, Waterloo, Canada, 96.4/100.
2009–2011 **M.Sc.**, *Simon Fraser University*, Vancouver, Canada, 4.26/4.33.
2005–2009 **B.Eng.**, *Zhejiang University*, Hangzhou, China, 3.74/4.0.

Master's Thesis

- Title *Computational Study on Bidimensionality Theory Based Algorithms*
Supervisor Dr. Qianping Gu

Experience

Work Experience

- Nov. 2011 – **Software Engineer**, *Fortinet Inc.*, Burnaby, BC.
Apr. 2013 Developed security solutions by detecting and analyzing vulnerabilities in operating systems, software, and applications.
Jul. 2011 – **Research Engineer**, *WebTech Wireless Inc.*, Burnaby, BC.
Oct. 2011 Internship sponsored by Mitacs-Accelerate Program. Worked on solving vehicle routing problem with time windows and skill-matching heuristically with Google CP Solver.

Research Assistant

- 2013–Present **Research Assistant**, *Institute for Quantum Computing, University of Waterloo*.
Research focuses on quantum algorithms and quantum computation.
2009–2011 **Research Assistant**, *Network Modelling Lab, Simon Fraser University*.
Research focused on algorithmic graph theory, specifically on bidimensionality-theory-based algorithms for solving hard problems.
2008–2009 **Undergraduate RA**, *Hardware/Software Co-design Lab, Zhejiang University*.
Participated in research on Cache/Register Optimizing in multi-core architecture.

Teaching Assistant

- Fall 2015/2016 **Teaching Assistant**, *University of Waterloo*.
CS 115 Introduction to Computer Science 1
Spring 2013, Fall 2014 **Teaching Assistant**, *University of Waterloo*.
CS 245/SE 212 Logic and Computation

- Summer 2010 **Teaching Assistant**, *Simon Fraser University*.
CMPT 307 Data Structures
- Fall 2009 **Teaching Assistant**, *Simon Fraser University*.
CMPT 120 Introduction to Computing Science and Programming I

Honors and Awards

- 2015 NSERC Canada Graduate Scholarship, University of Waterloo
- 2014 Ontario Graduate Scholarship, University of Waterloo
- 2014 President's Graduate Scholarships, University of Waterloo
- 2013 GO-Bell Scholarship, University of Waterloo
- 2013 UW Graduate Entrance Scholarship (Declined), University of Waterloo
- 2011 Mitacs-Accelerate Internship Grant, Mitacs
- 2010 Graduate Fellowship, Simon Fraser University
- 2009 Outstanding Thesis Award, Zhejiang University
- 2008 Excellence Award in the 10th Zhejiang University Student Research Training Program
- 2007 Second Class Academic Scholarship, Zhejiang University
- 2007 Third Prize Award in the Province, National Mathematical Modeling Competition
- 2006 Third Class Academic Scholarship, Zhejiang University
- 2006 Outstanding Student Leader Award, Zhejiang University

Publications

Journal Papers

Richard Cleve, Debbie Leung, Li Liu, and Chunhao Wang. Near-linear construction of exact unitary 2-designs. *Quantum Information and Computation*, 16(9&10):0721–0756, 2016.

Jianliang Ma, Chunhao Wang, Baozhong Yu, and Tianzhou Chen. Global register alias table: Boosting sequential program on multi-core. *Future Generation Computer Systems*, 28(6):957–964, 2012.

Conference Papers

Richard Cleve and Chunhao Wang. Efficient quantum algorithms for simulating lindblad evolution. In *44th International Colloquium on Automata, Languages, and Programming, ICALP 2017, July 10-14, 2017, Warsaw, Poland*, pages 17:1–17:14, 2017.

Chunhao Wang and Qian-Ping Gu. Computational study on bidimensionality theory based algorithm for longest path problem. In *Algorithms and Computation: 22nd International Symposium, ISAAC 2011, Yokohama, Japan, December 5-8, 2011. Proceedings*, volume 7074, page 364. Springer, 2011.

Chunhao Wang, Lihan Ju, Di Wu, Lingxiang Xiang, Wei Hu, and Tianzhou Chen. Global register alias table: Executing sequential program on multi-core. In *Proc. of the 10th International Conference on Computer and Information Technology CIT 2010*, pages 1818–1824. IEEE Computer Society, 2010.