Cong Yu

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🐦 BenyucongYu   •   ⓞ benyucong   •   Last updated on December 14, 2023

I am a first-year Ph.D. student studying computer science at Aalto University where I am advised by Prof. Bo Zhao. My academic focus centers on enhancing data-intensive machine learning systems and optimizing quantum computing from a systemic viewpoint. I aim to contribute innovative methodologies for scalable machine learning and improve the overall performance of quantum computing through hardware-software integration and error mitigation strategies.

Education

Doctoral Researcher in Computer Science, Aalto University	Dec 2023 – Present
Master of Computing (General Track), National University of Singapore (4.08/5.0)	Jan 2022 – Nov 2023
Master of Science in Electrical Engineering, University of Southern California (3.96/4.0)	Aug 2018 – Dec 2019
B.E. in Electronic and Information Engineering, Beihang University (3.6/4.0)	Sept 2014 – July 2018

Industry & Research Experience

TikTok Pte. Ltd., Singapore — Backend Engineer Intern (Mentor: Zhaojie Niu)	May 2023 – Sept 2023
StarFive Technology Co., Ltd., Singapore — Engineer Intern (Mentor: Zhiguo Ge)	Dec 2022 – Feb 2023
Institute for Quantum Computing, Baidu, Beijing — Software Engineer Intern	July 2020 – Sept 2020
University of Southern California, Los Angeles — M.S. Student (Supervisor: Todd Brun)	May 2019 – Sept 2019
University of Washington, Seattle — VISIT Student (Supervisor: M.P. Anantram)	Sept 2017 – Nov 2017

Honors & Awards

Masters Students Honors Program of USC ECE department	2019
First Prize of The 32nd Beijing Undergraduate Engineering Physics Competition	2015
First Prize of 2015 Mathematical Competition of Beihang University (ranked 11th).	2015

Publications [Google Scholar]

2018

1. *Engineering of the resistive switching properties in V2O5 thin film by atomic structural transition: Experiment and theory*
   Zhenni Wan, Hashem Mohammad, Yunqi Zhao, **Cong Yu**, Robert B Darling, and MP Anantram
   Journal of Applied Physics 2018

Posters

Quantum Information Processing 2020, Shenzhen	Jan 2020
GENERAL ARITHMETIC CODING FOR QUANTUM COMPRESSION	

Teaching

Linear Algebra for Engineering (USC EE 510), Grader	Fa2019

Skills

Programming	C++, C, Python, OCaml, Scala, LLVM
Tools	Linux, vim, git, bash, tmux