

JIADONG ZHU

M.Phil. \diamond Microelectronics Thrust

The Hong Kong University of Science and Technology (Guangzhou)

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RESEARCH INTERESTS

- AI for chip design
- Electronic design automation (EDA)
- FPGA architecture
- ML accelerator

EDUCATION

HKUST(GZ), Guangzhou, China Aug. 2022 – Jul. 2024

M.Phil. Microelectronic

Thesis: Exploring FPGA Architecture for Deep Learning Acceleration

Advisor: Yuzhe Ma

Shanghai University, Shanghai, China Sep. 2018 – Jul. 2022

B.Eng. Electrical Engineering and Automation

PUBLICATIONS

† denotes equal contribution.

Journal Papers

- [J1] Dongsheng Zuo †, **Jiadong Zhu** †, Yikang Ouyang, and Yuzhe Ma, “RL-MUL: Multiplier Design Optimization with Deep Reinforcement Learning”, under review in ACM Transactions on Design Automation of Electronic Systems (**TODAES**), arxiv preprint: 2404.00639.

Conference Papers

- [C2] **Jiadong ZHU** †, Dongsheng Zuo †, and Yuzhe Ma, “A Holistic FPGA Architecture Exploration Framework for Deep Learning Acceleration”, IEEE/ACM Asian and South Pacific Design Automation Conference (**ASPDAC**), Tokyo, Jan. 20-23, 2025.
- [C1] Dongsheng Zuo, **Jiadong ZHU**, Chenglin Li, and Yuzhe Ma, “UFO-MAC: A Unified Framework for Optimization of High-Performance Multipliers and Multiply-Accumulators”, IEEE/ACM International Conference on Computer-Aided Design (**ICCAD**), New Jersey, Oct. 27–31, 2024.

EXPERIENCE

Research Assistant Sep. 2024 – Jan. 2025

HKUST(GZ)

Guangzhou, China

Engineering Intern Dec. 2021 – May. 2022

Festo (China) Ltd.

Shanghai, China

Engineering Intern Aug. 2021 – Oct. 2021

SAIC Motor Passenger Vehicle Co., Ltd.

Shanghai, China

Engineering Intern Jul. 2021 – Aug. 2021

Shanghai Automation Instrumentation Co., Ltd.

Shanghai, China

Engineering Intern Jul. 2020 – Sep. 2020

Shanghai Automation Instrumentation Co., Ltd.

Shanghai, China

AWARDS AND HONORS

- [A5] **Full Postgraduate Studentship**, HKUST(GZ), 2022 – 2024.
- [A4] **First-Class Academic Scholarship**, SHU, 2021.
- [A3] **Flama Outstanding Scholarship**, SHU, 2020.
- [A2] **Self-Discipline Scholarship**, SHU, 2020.
- [A1] **China International College Students’ “Internet+” Innovation and Entrepreneurship Competition Second Prize**, SHU, 2020.

GRADUATE-LEVEL COURSES

- IOTA5501: Convex and Nonconvex Optimization
- MICS6000L: Computer Architecture
- MICS6000Q: VLSI Design Optimization and Closure
- MICS6000U: ML Accelerators