JIADONG ZHU

Ph.D. student \diamond Microelectronics Thrust The Hong Kong University of Science and Technology (Guangzhou) jzhu484@connect.hkust-gz.edu.cn

RESEARCH INTERESTS

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

EDUCATION

HKUST(GZ), Guangzhou, China Feb. 2025 – Jul. 2028 Ph.D. Microelectronic

Advisor: Yuzhe Ma

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] Dongshenng Zuo †, **Jiadong Zhu** †, Yikang Ouyang, and Yuzhe Ma, "RL-MUL 2.0: Multiplier Design Optimization with Parallel Deep Reinforcement Learning and Space Reduction", ACM Transactions on Design Automation of Electronic Systems (**TODAES**).

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 HKUST(GZ) Guangzhou, China	Sep. 2024 – Jan. 2025
Engineering Intern Festo (China) Ltd. Shanghai, China	Dec. 2021 – May. 2022
Engineering Intern SAIC Motor Passenger Vehicle Co., Ltd. Shanghai, China	Aug. 2021 – Oct. 2021
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Engineering Intern Jul. 2021 – Aug. 2021

Shanghai Automation Instrumentation Co., Ltd.

Shanghai, China

Jul. 2020 - Sep. 2020

Shanghai Automation Instrumentation Co., Ltd. Shanghai, China

AWARDS AND HONORS

- [A6] PhD Full Postgraduate Studentship, HKUST(GZ), 2025 2028.
- [A5] MPhil 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

MICS5520: Physical Design Automation of Digital Systems

IOTA5501: Convex and Nonconvex Optimization

MICS6000U: ML Accelerators

MICS6000L: Computer Architecture

MICS6000Q: VLSI Design Optimization and Closure