JIADONG ZHU

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

RESEARCH INTERESTS

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

EDUCATION

HKUST(GZ), Guangzhou, China
M.Phil. Microelectronic

Shanghai University, Shanghai, China
B.Eng. Electrical Engineering and Automation

Aug. 2022 – Jul. 2024

Sep. 2018 – Jul. 2022

PUBLICATIONS

 \dagger denotes equal contribution.

Journal Papers

[J1] Dongshenng 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 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
Engineering Intern Shanghai Automation Instrumentation Co., Ltd. Shanghai, China	Jul. 2021 – Aug. 2021
Engineering Intern Shanghai Automation Instrumentation Co., Ltd. Shanghai, China	Jul. 2020 – Sep. 2020

AWARDS AND HONORS

- $[A5] \ \ \textbf{Full Postgraduate Studentship}, \ HKUST(GZ), \ 2022-2024.$
- [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

 $\rm MICS6000Q:$ VLSI Design Optimization and Closure

 $\rm MICS6000U\colon ML$ Accelerators