# Chen Chen

#### **Education**

**Ph.D. in Microelectronics**, Hong Kong University of Science and Technology (Guangzhou) 2022 – present Advisor: Hongce Zhang

- M.S. in Electronic Engineering, The Hong Kong University of Science and Technology
- B.S. in Electronic Information Technology, Macau University of Science and Technology

### **Experiences**

**Visiting Scholar**, *University of Maryland*, *College Park* (with Prof. Cunxi Yu on logic synthesis and ML for formal verification)

2024.09-2025.06

Independent Study and Research, The Hong Kong University of Science and Technology (with Prof. Wei Zhang on High-Radix Fast Fourier Transform for CNN Accelerator on FPGA using HLS) 2021.09-2022.02

**Publications** [Google Scholar: 0k+ citations and an h-index of 1]

#### 2025.

- Revisit Choice Network for Synthesis and Technology Mapping Chen Chen, Jiaqi Yin, and Cunxi Yu ICCAD 2025
- 2. e-boost: Boosted E-Graph Extraction with Adaptive Heuristics and Exact Solving Jiaqi Yin, Zhan Song, **Chen Chen**, Yaohui Cai, Zhang Zhiru, and Cunxi Yu ICCAD 2025
- 3. ReVEAL: Reverse Engineering of Multiplier Architectures via Graph Learning for Computer Algebra Verification

**Chen Chen**, Daniela Kaufmann, Chenhui Deng, Hongce Zhang, and Cunxi Yu IWLS 2025

- E-morphic: Scalable Equality Saturation for Structural Exploration in Logic Synthesis
   Chen Chen \*, Guangyu Hu \*, Cunxi Yu, Yuzhe Ma, and Hongce Zhang
   DAC 2025
- BoolE: Exact Symbolic Reasoning via Boolean Equality Saturation
  Jiaqi Yin, Zhan Song, Chen Chen, Qihao Hu, and Cunxi Yu
  DAC 2025

#### 2024.....

6. E-Syn: E-Graph Rewriting with Technology-Aware Cost Functions for Logic Synthesis
Chen Chen \*, Guangyu Hu \*, and Zuo Dongsheng, Cunxi Yu, Yuzhe Ma, and Hongce Zhang
DAC 2024

### **Awards**

Best Paper Nomination at DAC	2025
3rd Place Award of EDAthon Contest	2023

### **Service**

## Artifact Evaluation Committee

The 19th International Conference on Integrated Formal Methods (IFM2024)

The 20th International Conference on Integrated Formal Methods (IFM2025)

The 31th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS2025)