

EDUCATION

- Bachelor’s Degree of XiaMen University

Digital Media Technology; Acc GPA: 3.54/4.0 (Gain Schorlarship)

10/2017 - 08/2021
- Mphil’s Degree of The Hong Kong University of Science and Technology (GuangZhou)

Microeletronics; Supervised by Yangdi Lyu; Acc GPA: 4.014/4.3 (Gain Schorlarship)

09/2022 - 08/2024
- PhD Degree of The Hong Kong University of Science and Technology (GuangZhou)

Microeletronics; Supervised by Yangdi Lyu;(Gain Schorlarship)

09/2024 - Present

RESEARCH INTEREST & SKILLS

- EDA:** Concolic Testing, Hardware Fuzzing, RTL Static Analysis & Generation, Hardware Trojan
- Optimization:** Meta-heuristic Optimization, Genetic Algorithm
- Tools:** Cadence Jaspergold, Synopsys Formality, Cocotb, Verilator

PUBLICATION

- Yuntao Lu, Chen Bai, Yuxuan Zhao, **Ziyue Zheng**, Yangdi Lyu, Bei Yu *DeepVerifier: Learning to Update Test Sequences for Coverage-Guided Verification*. TODAES 2025.
- Ziyue Zheng**, Xiangchen Meng, Yangdi Lyu, *APE-FV: Concolic Testing for RTL Functional Verification Using Adaptive Path Exploration*. ICCD 2024.
- Xiangchen Meng\*, **Ziyue Zheng\*** Yangdi Lyu, *FlattenRTL: An Open Source Tool for Flattening Verilog Module at RTL Level*. 2024 2nd International Symposium of Electronics Design Automation (ISED), 2024, pp. 752-757
- Ziyue Zheng**, Yangdi Lyu, *STSearch: State Tracing-based Search Heuristics for RTL Validation*. 2023 Design, Automation & Test in Europe Conference & Exhibition (DATE), 2023, pp. 1-6
- Yajing Huang, Choon Yian Haw, **Ziyue Zheng**, Junyong Kang, Jin-Cheng Zheng, Hui-Qiong Wang, *Biosynthesis of Zinc Oxide Nanomaterials from Plant Extracts and Future Green Prospects: A Topical Review*. Adv. Sustainable Syst. 2021, 5, 2000266.
- Kar Woon Tan, Chun Man Yap, **Ziyue Zheng**, Choon Yian Haw, Poi Sim Khiew, Wee Siong Chiu, *State-of-the-Art Advances, Development, and Challenges of Metal Oxide Semiconductor Nanomaterials for Photothermal Solar Steam Generation*. Adv. Sustainable Syst. 2022, 6(4), 2100416.

INDUSTRY EXPERIENCE

- China Mobile Online Service Company

Algorithm engineer

Research & Project: Deep Semantic Structured Model; English Chatbot through Click-through Data

03/2020
- Oxford-Hainan Blockchain Research Institution

Researcher

Research & Project: Concolic Testing for Smart Contract; Random Number in Blockchain.

03/2021

AWARDS

- Second Prize:** China Undergraduate Mathematical Contest in Modeling(CUMCM).[3.26%]
- 4th Place:** Malaysia National International Collegiate Programming Contest(ACM-ICPC).[4/36]
- Outstanding Prize:** AI+ College Students Innovation and Entrepreneurship Competition.[3/333]
- Goal Medal:** 2021Q2 Rebase Blockchain Hackathon.[1/28]