

EDUCATION

- Hong Kong University of Science and Technology, Guangzhou Campus** 2022 - Now
Doctor of Philosophy (Microelectronics)
- Nanyang Technological University, Singapore** Jan 2021 – Mar 2022
Master of Science (Electronics)
- Henan University, China** Aug 2016 – Jun 2020
Bachelor of Science (Electronic Information Science and Technology)

WORK EXPERIENCE

- Hong Kong University of Science and Technology, Guangzhou Campus** Mar 2022 - Aug 2022
- Solved the Boolean Satisfiability problem (SAT) via machine learning
- Explored opportunities in the SAT solving and hardware formal verification with the help of the machine learning
- Seeland Company-Guangzhou Sanshiqidu Smart Home Co., Ltd.** Aug 2020 - Dec 2020
- Used Altium Designer to design PCB circuit boards for smart cushions, furnace temperature monitoring alarms and other projects, and test existing projects
- Welded circuit boards and assembling electronic products

PROJECTS

- Synthesizing Environment Invariants for hardware verification** Sep 2022 - now
- Synthesized environment invariants via Sygus-PDR
- Designed some effective heuristics to speed up the process of synthesizing environment invariants
- Solving the SAT problem via machine learning** Mar 2022 - now
- Designed an end-to-end neural network to predict a satisfying assignment for the Boolean Formula
- Solved the symmetry-breaking problem in the existing model
- Achieved better performance compared to state-of-the-art models
- The PUF labels recognition via Deep Learning** May 2021 - Sep 2021
- Designed a CNN model to process the classification task of the liquid crystal droplet. Each droplet is an anti-counterfeiting label
- Deployed environment on the Colab and achieve better performance compared to the baselines
- Energy-Saving and Emission-Reduction Competition** Mar 2019 - Aug 2019
- Designed a forest fire alarm system controlled by a single-chip microcomputer, which is powered by tree swing
- Won the third prize at school level and applied for the patent for utility model
- College Students Innovations Special Project** Apr 2018 – Apr 2019
- Designed an energy-saving water measurement system based on self-generating electricity
- Applied for patents for utility model and accepted by the project with "excellent" results

PUBLICATIONS

Multicolor Light Mixing in Optofluidic Concave Interfaces for Anticounterfeiting with Deep Learning Authentication[J]. ACS Applied Materials Interfaces, 2022.
*Chenlu Wang, Zhiyuan Yan, Chaoyang Gong, Hui Xie, Zhen Qiao, Zhiyi Yuan and Yu-Cheng Chen**

TECHNICAL SKILLS

- Programming: Python, Verilog, C primer plus, Matlab
- Language: Proficient in English(LELTs: 6.5), Mandarin, Cantonese
- Software & Tools & Operating System: MicroSoft Office, Latex, LINUX

AWARDS

- 2019-2020: Triple-A Student of Henan University, the scholarship at school level, Third Prize of Academic Scholarship of Miami College
- 2018-2019: Triple-A Student of Henan University, First Prize of Academic Scholarship of Miami College, "Blue Bridge Cup MCU Competition" Provincial Second Prize
- 2017-2018: Triple-A Student of Henan University, the scholarship at school level, Second Prize of Academic Scholarship of Miami College