

YAN ZHIYUAN

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EDUCATION

- Hong Kong University of Science and Technology, Guangzhou Campus** *Sep 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)

PROJECTS

- Solving the SAT problem via machine learning** *Mar 2022 - Sep 2022*
 - 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 new CNN model to process the classification task of the liquid crystal droplet. Each droplet is an anti-counterfeiting label
 - Run the code on the Colab and got nearly 100% accuracy rate
- 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

WORK EXPERIENCE

- Hong Kong University of Science and Technology, Guangzhou Campus** *Mar 2022 - Aug 2022*
Research Assistant
 - Cooperated with my supervisor to solve the SAT problem in the hardware
 - Explored more 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*
R&D Intern
 - 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
- Youth Volunteer Association of Miami College, Henan University** *June 2017 – Aug 2018*
Vice-Chairman
 - Founded the Young Volunteer Association, participated in formulating the rules and regulations
 - Planned and participated in many voluntary activities

PUBLICATION

- 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**

AWARD

- **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

TECHNICAL SKILLS

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