

# Yaohui Han

Changsha, China

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## EDUCATION

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**Central South University**, Changsha, China

*Major in* Applied Physics (National Top-notch program)

*Minor in* Electronic Science and Technology

Sep.2021 — Sep.2025

Grade: 88.14/100

## ACADEMIC EXPERIENCE

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### HKUST(GZ)

Jul.2024 — Present

- Co-supervised by **Prof. Yuzhe Ma** and **Prof. Tsung-Yi Ho**, as a Research Assistant.
- Research Topic: AI for Clock Gating Clustering, Chip packaging optimization.

### CUHK-Shenzhen

Feb.2024 — Jul.2024

- Join the group of **Prof. Tinghuan Chen**, as a Research Assistant.
- Create a chip internal coupling capacitance dataset.
- Train and optimize PointNet-based models.

### Central South University

Jul.2022 — Apr.2023

- Join the group of **Prof. Duan Huang**, as a Research Assistant.
- Design a RISC-V processor called “Chenhui” and its simulator.
- Participate in developing the LDPC functions and its instructions.

## SELECTED PROJECTS

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### mcspsy: A Python package for Mobile Crowdsensing

Jul.2023 — Present

- Supervised by Prof. Anfeng Liu at CSU.
- Design several functions for mobile crowd sensing such as  $\epsilon$ -Greedy, UCB algorithms.
- Tested by the Distributed and Edge Computing Laboratory of CSU.

### Chenhui: A RISC-V core with LDPC functions

Jul.2022 — Jul.2023

- Under the guidance of Beijing Open Source Chip Research Institute and Institute of Computing Technology of the Chinese Academy of Sciences, called “One Student One Chip” program.
- Use NEMU (based on C) to evaluate my processor (based on Verilog) and finish the front-end design.
- Patent “An LDPC computing system based on RISC-V instruction set” is under review.  
(Patent number: 202310808424X)

### Microfluidic biochips synthesis system control program based on STM32

Mar.2022 — Mar.2023

- Supervised by Prof. Zhengchun Liu at CSU and Prof. Honglu Zhang at SJTU.
- Implemented global control of the system and Bluetooth, Modbus, etc.
- Awarded as “Key Support Project of Hunan Province College Innovation and Entrepreneurship Training Plan”, “Hunan Province College Student Innovation and Entrepreneurship Outstanding Project”.

### UAV system based on multiple integrated navigation chip

Mar.2023 — Oct.2023

- Supervised by Prof. Duan Huang at CSU, in collaboration with SJTU and NUDT.
- Implemented BDS and INS navigation chips on the UAVs.
- Transfer of technology to LCMICRO Corporation.

## PUBLICATIONS

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- Y. Han, A. Liu, et al. “Selecting Workers like Expert for Crowdsourcing by Integration Evaluation of Individual and Collaborative Abilities.” (*Accepted by ESWA*)
- J. Tang, Y. Han, A. Liu, et al. “PUWR-TSSG: A CMAB Based Post-Unknown Worker Recruitment Scheme for Three-Stage Stackelberg Game in MCS.” (*Under Review by INS*)

## HONOR AND AWARDS

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- **Silver Medal** - kaggle competition: Google - Fast or Slow? Predict AI Model Runtime Nov.2023
- **National First Prize** - National Undergraduate Electronics Design Contest Jul.2023
- **National First Prize** - Chinese Undergraduate Physics Experiment Competition Nov.2023
- **Provincial First Prize** - China Undergraduate Mathematical Contest in Modeling Sep.2023
- **National Third Prize** - MathorCup Big Data Competition Oct.2023
- **Scholarship for Scientific and Technological Innovation** - from GEM Co.,Ltd Dec.2023
- **Scholarship for Academic Excellence** - from CSU(twice) Jan.2024
- **Pacemaker to Merit Student** - from CSU(twice) Nov.2023

## OTHER EXPERIENCES

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- **President of the Astronomy Association** Central South University
- **Technical Director of Electronics Association** Central South University
- **Senior Judge** Xunxingke Astronomy Community
- **Monitor of Top-notch program** Central South University

## SKILLS

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- **Programming:** Python, MATLAB, C, Verilog, LaTeX, Markdown...
- **Software Skills:** Origin, Visio, Keil, Vivado, Modelsim...
- **English:** IELTS: 7.0
- **Quality:** Never delay at work, have the patience and creativity to formulate and solve problems.