Yaohui Han

Guangzhou, China
han0129@csu.edu.cn — 15566233602 — https://yaohui.netlify.app/

EDUCATION

Central South University, Changsha, China — Sep.2021 — Jul.2025
Major in Applied Physics (National Top-notch program) — Grade: 88.21/100
Minor in Electronic Science and Technology

ACADEMIC EXPERIENCE

HKUST(GZ) — Jul.2024 — Dec.2024

- Join the group of **Prof. Yuzhe Ma**, as a Research Assistant.
- Research Topic 1: AI for Static Timing Analysis.
- Research Topic 2: LLM for Floorplan.

CUHK-Shenzhen — Feb.2024 — Aug.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.

PUBLICATIONS

- Y. Han, A. Liu, et al. "Selecting Workers like Expert for Crowdsourcing by Integration Evaluation of Individual and Collaborative Abilities." *(Accepted by ESWA, 2024)*
- 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, 2024)*

HONOR AND AWARDS

- **Silver Medal** - kaggle competition: Google - Fast or Slow? Predict AI Model Runtime — Nov.2023
- **National First Prize** - Chinese Undergraduate Electronics Design Contest — Jul.2023
- **National First Prize** - Chinese Undergraduate Physics Experiment Competition — Nov.2023
- **Provincial First Prize** - Chinese Undergraduate Mathematical Contest in Modeling (MCM) — 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

SELECTED PROJECTS

mcspy: 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 ϵ-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.

OTHER EXPERIENCES

- **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

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