Yaohui Han

Email: han0129@csu.edu.cn
Github: Han-0107
Personal Website: yaohui.netlify.app

EDUCATION

Central South University   Sep.2021 — Jul.2025
Major in Applied Physics (National Top-notch program)   Grade: *88.50/100*   Rank: *3/32*
Minor in Electronic Science and Technology

ACADEMIC EXPERIENCE

HKUST(GZ)   Jul.2024 — Dec.2024

- Co-supervised by **Prof. Yuzhe Ma** and **Prof. Tsung-Yi Ho**, 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

Journal Paper

[**J2**] Y. Han, A. Liu, et al. "Selecting Workers like Expert for Crowdsourcing by Integration Evaluation of Individual and Collaborative Abilities.", Expert Systems With Applications (**ESWA**), ISSN 0957-4174 (paper)

[**J1**] 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)

Conference Paper

[**C1**] W. Zhang, Y. Han, B. Yu et al. "PointCap: An efficient model for Chip-scale Interconnect Capacitance Extraction" (Under Review by DATE 2025)

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 — Jul.2024

- Supervised by Prof. Anfeng Liu at CSU.
- Design several functions for mobile crowd sensing such as ϵ-Greedy, UCB algorithms.
- Applied in 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
- **Volunteer Reviewer**   Elsevier

SKILLS

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

REFERENCES

Prof. Yuzhe Ma
Assistant Professor, Microelectronics Thrust, HKUST(GZ)
E-mail: yuzhema@hkust-gz.edu.cn
Scholar Profiles: Personal Page

Prof. Tinghuan Chen
Assistant Professor, School of Science and Engineering, CUHK(SZ)
E-mail: chentinghuan@cuhk.edu.cn
Scholar Profiles: Personal Page

Prof. Anfeng Liu
Professor, School of Computer Science and Engineering, Central South University
E-mail: afengliu@mail.csu.edu.cn
Scholar Profiles: Personal Page