Zixuan Zhou

Email: HailyZhou@outlook.com
2200012728@stu.pku.edu.cn
LinkedIn: zixuan-zhou-aa5334348
GitHub: github.com/Zixuan-Haily-Zhou

Education

Peking University — Beijing, China
B.S. in Applied Physics, Department of EECS — Sep 2022–Jul 2026
Experimental Class in Electronic Information Science(Inaugural)
Last year GPA: 3.80/4.00

NO.1 Middle School affiliated to Central China Normal University — Wuhan, Hubei, China
Outstanding Graduate — Sep 2019–Jul 2022

Research Experience

Backside Power Delivery Network(BSPDN) for Carbon Nanotube FET — Peking University
Tutor: Prof. Rongmei Chen — Sep 2024-Present

- Applying BSPDN to low-temperature thin-film transistors
- Novel structures of Monolithic 3D design using the knowledge in BSPDN and Carbon Nanotube FET(CNFETs)
- Experiments on novel methods to do wet etch

Internship Experience

Shanghai IC Research and Development Center (ICRD) — Shanghai, China
Tutor: Chen Li — Jul 2024–Aug 2024

- Investigation on the differences between industrial and academic IC fabrication process
- Experience on large scale industrial IC fabrication process

Publications

- **Title:** Backside Power Delivery Network (BSPDN) in coordination with low-temperature thin-film transistors**(First Author)**
- **Status:** Submitted

Course Projects

- **16bit High-speed Adder Design:** In the course "Digital IC and Systems", I succesfully design a 16bit RCA adder and draw its layout. See the project at adder.
- **Sparse Matrix-Dense Matrix Multiplication accelerator:** In the course "High-level Chip Design", I develop a hardware accelerator for SpMM. See the project at SpMM.
- **Boolean Circuit Matching:** In the course "Modeling, Analysis and Optimization for Computing System", I develop a work using SAT tools. See the project at BCM.
- **NoGo Game:** In the course "Introduction to Computation", my classmate and I develop a game using C++, the whole interface is designed and programmed by myself. See the project at Nogo Game.

Relevant Courses

- **Circuit Design**: Principles and Design of Digital Systems(Honor Track); Principles of Analog Circuits(Honor Track); Analog Integrated Circuits and Systems; Digital Integrated Circuits and Systems
- **Chip Design**: High-level Chip Design
- **Device & Physics**: Physics of Semiconductor; Integrated Circuit Devices; Integrated Circuit Manufacturing Technology; Quantum Mechanics
- **Signal Processing**: Signals and Systems (Honor Track)
- **Computing**: Introduction to Computation; Data Structure and Algorithm; Modeling, Analysis and Optimization for Computing Systems

Skills

- **Equipment for Device Fabrication:** E-Beam Vapor System/ Scanning Electron Microscope(SEM)/ Reactive Ion Etching(RIE)/ Laser Direct Writing/ Step Profiler/...
- **Programming:** C++ / Verilog/ MATLAB/ Python(seldom used by myself)
- **CAD tools:** Virtuoso/ Xilinx Vivado / Xilinx Vitis HLS(beginner)
- **Languages:** Mandarin(Native)/ English(TOEFL: 106)/ French(beginner)
- **Other skills:** Github/ Latex(Overleaf)

Scholarships and Awards

- Tiktok Scholarship for EE Student 2023–2024
- Having been selected as a member of the inaugural Experimental Class in Electronic Information Science 2023–2026
- EECS Cup Table Tennis Competition Women's Singles Champion 2023,2024
- Peking University Freshman Cup Table Tennis Competition Top 8 2022

Self-assessment

I am a passionate and dedicated student, who has strong self-discipline. Motivated by my curiosity and desire for knowledge, I am also a good question-raiser and problem identifier. In addition, I am an effective communicator with a collaborative spirit, which I believe will contribute to the success of my team.

Extra-curriculum Outreach

- Captain of EECS Table Tennis team at Peking University Sept, 2023–Sept,2024
  Led the team to achieve the best rank in history.
- Rural education support program in Jiangxi Province, 2024 Aug, 2024
  Teaching ancient Chinese poetry to left-behind children
- Member of EECS Basketball team at Peking University Sept, 2024–Present

Appendix

If you would like to learn more about my background and research, feel free to explore my personal website at https://zixuan-haily-zhou.github.io/