

EDUCATION

Peking University

B.S. in Applied Physics, Department of EECS

Experimental Class in Electronic Information Science(Inaugural)

Last year GPA: 3.80/4.00

Beijing, China

Sep 2022–Jul 2026

NO.1 Middle School affiliated to Central China Normal University

Outstanding Graduate

Wuhan, Hubei, China

Sep 2019–Jul 2022

RESEARCH EXPERIENCE

Backside Power Delivery Network(BSPDN) for Carbon Nanotube FET

Tutor: Prof. Rongmei Chen

Peking University

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)

Tutor: Chen Li

Shanghai, China

Jul 2024–Aug 2024

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

COURSE PROJECTS

- **16bit High-speed Adder Design:** In the course “Digital IC and Systems”, I successfully 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](#).

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:** Virtuosio/ Xilinx Vivado / Xilinx Vitis HLS(beginner)
- **Languages:** Mandarin(Native)/ English(TOEFL: 106)/ French(beginner)
- **Other skills:** Github/ Latex(Overleaf)

SCHOLARSHIPS AND AWARDS

- Scholarship for E-class Students 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/>