

Zonghua Ouyang

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Education

University of Pennsylvania

Philadelphia, Pennsylvania, United States

Master of Science in Electrical Engineering, GPA: 4.00/4.00

Expected May 2026

Chongqing University of Posts and Telecommunications

Chongqing, China

Bachelor of Engineering in Electrical Engineering, GPA: 3.70/4.00

June 2024

Northern Arizona University

Flagstaff, Arizona, United States

Bachelor of Science in Electrical Engineering, GPA: 3.70/4.00

May 2024

Technical Skills

Programming Languages: Python, MATLAB, C/C++, Java, System Verilog, Swift, Kotlin, LaTeX

Software: Altium Designer, Cadence, Vivado, Simulink, Multisim

Instruments: Waveform Generator, Multimeter, Vector Network Analyzer, LCR Meter, Oscilloscope, Logic Analyzer, Spectrum Analyzer

Fabrication: 3D Printing, Soldering, PCB Fabrication

Relevant Experience

Tape-Out Experience of Spectrum Analyzer, Team of 2

Feb. 2025 ~ May 2025

University of Pennsylvania

- Designed and layout a PLL synthesizers on Cadence Virtuoso using only transistors independently.
- The frequency range reaches 1 to 600 MHz with a step size of 10 kHz and a lock time of 1 ms
- Build a serial input parallel output on-chip memory compatible with SPI with a size of 64 bytes

Hydropower Collegiate Competition (HCC), Team of 6, 1st Place

Sept. 2023 ~ May 2024

Northern Arizona University

- Won the first place of the competition
- Built generator models and 5-bus systems using MATLAB
- Analyzed the efficiency of the power plant in different generator configurations

TI Cup National Undergraduate Electronic Design Contest

July 2021 ~ Aug. 2021

Team of 3, 1st Prize

Chongqing University of Posts and Telecommunications

- Won the first prize in the provincial contest
- Designed, fabricated, and tested a total harmonic distortion (THD) meter
- Developed, and debugged an Android app, which can connect to our THD meter
- Programed STM32, and ESP32 microcontrollers