

# Zonghua Ouyang

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## Education

### University of Pennsylvania

Philadelphia, Pennsylvania, United States

Master of Science in Electrical Engineering

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

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## Relevant Courses

- Digital Integrated Circuits
  - Power System
  - Electric Drives
  - Computer Architecture
  - Digital Signal Processing
  - Introduction to Networks and Protocols
  - Signals and Systems
  - Principle of Communication
  - Fundamentals of Computer Engineering
  - Fundamentals of Linear Algebra and Optimization
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## Relevant Experience

### Hydropower Collegiate Competition (HCC), Team of 6, 1<sup>st</sup> Place

Northern Arizona University

Sept. 2023 ~ May 2024

- 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

Team of 3, 1<sup>st</sup> Prize

Chongqing University of Posts and Telecommunications

July 2021 ~ Aug. 2021

- 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
- Programmed STM32, and ESP32 microcontrollers