# Hanle Zhang

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#### EDUCATION

## University of Chinese Academy of Sciences(UCAS)

Sept. 2021-Present

Bachelor of Computer Science and Technology (expected 2025)

Current GPA: 3.95/4 Ranking: 2/92 Jan. 2024-Present

University of California, Berkeley

Courses: CS152, CS170, CS188

Visiting Student in EECS Department

# ACADEMIC EXPERIENCE

## "One Student One Chip" Program Engineering Intern

July 2022-Aug. 2022

Beijing Institute of Open Source Chip

- Completed some functions of a software ISA emulator NEMU using C language: achieved a simple debugger and implemented some functions of C library string.h and stdio.h
- Developed a multi-cycle RISC-V processor using Verilog

## FPGA Verification Platform Engineering Intern

July 2023-Aug. 2023

Institute of Computing Technology, Chinese Academy of Sciences

- Finished an HLS version of LeNet running on an FPGA, which was served as one of the verification examples for a FPGA-based HLS verification platform ENCORE
- Used Vitis to synthesize IP core from LeNet's HLS design, built boot and root, started Linux on ZYNQ Sidewinder board and wrote bit stream on configurable fabric
- Trained parameters using Python version LeNet, wrote a memory mapping program to load parameters to FPGA

#### **International Summer School**

Aug. 2023

Institute of Computing Technology, Chinese Academy of Sciences

- Attended lectures on cloud computing systems, SMT formal verification, neural networks and deep learning
- Participated in seminars on FPGA, Emotion AI and NeRF

#### Projects

#### Computer Organization and Design Course Project

Institute of Computing Technology, Chinese Academy of Sciences

- Developed a multi-cycle MIPS processor and a RISC-V processor with Instruction Cache and Data Cache
- Implemented some functions of a DNN accelerator

#### Computer Architecture Project

Institute of Computing Technology, Chinese Academy of Sciences

- Supported exception handling, AXI bus interface, virtual memory, ICache

### Honors & Awards

Excellent Student in UCAS

June 2023

The First Prize of Scholarship in UCAS  $\,$ 

Nov. 2022

Outstanding Student Leader in UCAS

June 2022

#### SKILLS AND HOBBIES

**TOEFL**: 113 (R29, L30, S25, W29)

Aug. 2023

Programming: C, Verilog, MIPS AL, X86 AL (Some experience with: Python, C++, Chisel, Golang, HTML, CSS)

Music: Singing, playing traditional Chinese instrument Erhu

Sports: Basketball