Hanle Zhang

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Education

University of Chinese Academy of Sciences(UCAS) Bachelor of Computer Science and Technology Advisor: Prof. Yungang Bao

University of California, Berkeley

Visiting Student in EECS Department

CS152(Computer Architecture), CS170(Algorithms), CS188(Artificial Intelligence)

ACADEMIC EXPERIENCE

"One Student One Chip" Program Engineering Intern

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

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

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

- Co-developed a pipeplined LoongArch processor using Verilog
- Supported exception handling, AXI bus interface, virtual memory, ICache

Honors & Awards

First Class Academic Scholarship (Top 5%)

Pacemaker to Merit Student (Top 2%)

National Scholarship Nomination (Top 2%)

Outstanding Student Leader

Skills and Hobbies

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

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

Sept. 2021-July. 2025 (expected) Ranking: 2/92 GPA: 3.95/4.00

> Jan. 2024-May. 2024 GPA: 4.00/4.00

July 2022-Aug. 2022

July 2023-Aug. 2023

Aug. 2023

Aug. 2023