

Chun-Hao Chang

NATIONAL CHENG KUNG UNIVERSITY · B.E. DEGREE IN ELECTRICAL ENGINEERING

☎ (+886) 0912-694-598 | ✉ e24096409@gs.ncku.edu.tw | 📱 Haouo | 📧 chun-hao-chang-686719218

Summary

I am now purchasing B.E. degree of Electrical Engineering in National Cheng Kung University. I have enthusiasm for Computer Architecture, Digital Circuit Design and also take many courses related.

In this semester, I am participating in two courses "Advanced Computing Architecture and AI Chip Design" and "VLSI Digital Circuit Design". The former introduces advance Computing System Design and topics about AI Acceleration, the latter introduces transistor-level digital circuit design, optimization techniques and EDA tools like HSPICE, Virtuoso and Laker.

I also join extracurricular activities such as swimming team, animal welfare volunteer and free after-school tutoring for students.

Why Google HPS?

I hope that I can get familiar with how to design a hardware product with a system perspective because I have great interesting in Hardware Design and also Software-Hardware Co-design.

In Google HPS, we have to design a hardware product from the scratch, which covers software design for MCU, PCB Layout Design and Product Testing. I think this will be a great chance for me to know the basics of how to design a hardware product.

Furthermore, Google HPS is very suitable for me to know the environment and culture in the Google because I am interesting in Google as well.

Education

National Cheng Kung University

Tainan, Taiwan

B.S. DEGREE IN ELECTRICAL ENGINEERING

Sep. 2020 - Jun. 2024

- Intern Student in AI System Lab, NCKU EE
- Teaching Assistant in PlayLab, NCKU SOC
- Member of Swimming Team

National Changhua Senior High School

Changhua, Taiwan

REGULAR CLASS

Sep. 2017 - Jun. 2020

- Member of Swimming Team

Skills

Programming Language C, C++, Python

Hardware Design Language Verilog, Chisel

EDA tools H-Spice, Cadence Virtuoso, Synopsys Laker

Others Linux Environment, Git, Docker

Work Experience

Playlab

NCKU SOC

TEACHING ASSISTANT OF AI COMPUTING ARCHITECTURE AND SYSTEM, SPRING 2023

Feb. 2023 - Present

Playlab

NCKU SOC

TEACHING ASSISTANT OF AI COMPUTING ARCHITECTURE AND SYSTEM, FALL 2022

Sep. 2022 - Jan. 2023

Courses Related

Advanced Computer Architecture and AI Chip Design

NCKU SOC

SPRING 2023

OoO CPU, RISC-V Pipeline CPU implementation and topics about Neural Network Optimization

VLSI Digital Circuit Design

NCKU EE

SPRING 2023

VLSI Digital Design concepts and techniques such as speed & power optimization, circuit simulation with HSPICE and layout design with Laker

Computer Algorithm

NCKU EE

SPRING 2023

Basic algorithms, including Sorting, Dynamic Programming, Greedy Algorithm, Graph Algorithms and advanced Data Structures

Computer Organization

NCKU EE

FALL 2022

Basic Computer Architecture concepts with RISC-V ISA

Microelectronics

NCKU EE

FALL 2021 - FALL 2022

Semiconductors, BJTs and MOSFET, Small Signal Model and different types of Amplifiers

AI Computing Architecture and System

NCKU SOC

SPRING 2022

Simple RISC-V CPU implementation and basic ideas about how to accelerate AI Computing by SIMD instruction and Systolic Array

Electric circuits

NCKU EE

FALL 2021 - SPRING 2022

Electric circuit theory

Logical System

NCKU EE

SPRING 2021

Basic concepts about Logical Design and Digital Circuits

Introduction to Computers

NCKU EE

FALL 2020 - SPRING 2021

Programming concepts and techniques like Object-Oriented with C++ Programming Language