CHEN MUXI

Master of Artificial Intelligence, Specializing in Deep Learning and Generative AI

@ louis19980927@gmail.com 📞 0966096831 📍 Location, HsinChu 🌐 muxi1998.github.io/Portfolio/
 muxi1998

EXPERIENCE

Temporary employee
National Center for High-Performance Computing

📅 December 2021 – Ongoing 📍 Location: Work From Home

- Assisted with project tasks in the unit, including data collection, literature review, and programming.
- Focusing on AI application.
- Participated in **6** projects: (1) Visual-Language Pre-trainging, (2) Fire Smoke Detection, (3) CCTV Water Region Segmentation, (4) OCR Text Extraction, (5) Dangerous Action by Skeleton Detection, (6) Bus Fisheye Counter

Temporary employee
Department of Finance, CYCU

📅 March 2021 – April 2022 📍 Location: Work From Home

- Primary duty involved interpreting statistical data requirements or formulas described by the professor.
- Responsible for translating these requirements into program code using SAS language.

C++ Tutor
Myself

📅 April 2023 – June 2023 📍 Location: Work From Home

- Guide students to complete a text editor using C++.
- Explain some data structure concept.

PROJECTS

Indoor Localization with Magnetic Feature Fusion
Industry-NYCU cooperation (under confidentiality agreement)

📅 March 2022 - January 2023

- Design an AI model for better utilizing magnetic force feature.
- Achieving an accuracy of less than 10m in indoor localization.

Intelligent defect generation platform
ITRI-NYCU cooperation

📅 July 2021 - March 2022

- Responsible for building a GAN-based model to generate abnormal PCB samples with given defect type
- Compiled the project results into a paper and accepted by the International Conference on Consumer Electronics (ICCE).

MY LIFE PHILOSOPHY

"Burn yourself, illuminate others"
-
"Improve by 1% every day, and in 365 days, you will be 37 times stronger than you are now."

EDUCATION

M.Sc. in Artificial Intelligent
National Yang Ming Chiao Tung University

📅 July 2021 – November 2023

Thesis title: "SERVI: Structure Enhanced Regional Video Inpainting"
GPA 3.74

B.Sc. in Information and Computer Science
Chun Yuan Christian University

📅 Sept 2017 – June 2021

GPA 4.0 Graduate Ranking 1/82

MOST PROUD OF

🏆 **National University Student of Excellence Award**
Awarded by the Youth Salvation Corps to university students. (Mar 2021)

🏆 **CYCU Overall Benchmark Award**
The highest honor awarded to Chung Yuan graduates. Recognized as the top achiever (Outstanding) and selected as a graduate representative. (May 2021)

🏆 **Graduation Ceremony Speaker and Diploma Presenter**
Represented graduating class as a speaker and diploma presenter. (Jun 2021)

🏆 **Department Student Association President**
(1) Awarded the 2020 National University Student Society Evaluation, Excellence, (2) Campus-wide Evaluation, Excellence (Jun 2019 - Jun 2020)

CODING PORTFOLIO

Scheme Interpreter
C++

Developed an interpreter conforming to the Scheme syntax, which takes standard Scheme language syntax as input. This program can handle custom variables, function definitions, function calls, and recursive operations. It builds a parse tree using a tree structure to simulate the actual operation of the Scheme language, totaling **5,036 lines** of code.

Francis-compiler
C++

Developed a program simulating the operation of the FRANCIS Compiler. It processes the source code of SIC assembly language through Lexical Analysis and Syntax Analysis to generate intermediate code. The program also identifies and displays error messages during the process. The total code length is **5,369 lines**.

SIC/SICXE cross assembler
C++

Developed compilers for both SIC and SIC/XE, combined into a single project. This program translates SIC and SIC/XE assembly language into Object code based on input instructions. The total code length is **3,433 lines**.

C/C++ Lexical Analyzer
C++

Processes the input source code to perform tokenization and identify comments. Each extracted token is categorized and sorted, with its position recorded. Upon execution completion, the coordinates of each token occurrence are outputted. The program also provides a search feature for users to locate token addresses.

Pipelined CPU
Verilog

Implemented a 5-Stage Pipelined CPU in Verilog, capable of executing 16 MIPS instructions.
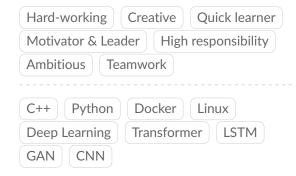
SIC/SICXE Lexical Analyzer
C++

A lexical analyzer for SIC and SIC/XE assembly languages using C/C++.

INTERESTS

Productivity

Notion · Obsidian · GTD · PARA · Zettelkasten

CS Related

Generative AI · Deep Learning · Automation · Application

Others

Photographing · Music · Movie · Cooking · Crochet · Trying something new

STRENGTHS

Hard-working · Creative · Quick learner · Motivator & Leader · High responsibility · Ambitious · Teamwork

C++ · Python · Docker · Linux · Deep Learning · Transformer · LSTM · GAN · CNN

LANGUAGES

English (TOEIC 955) ●●●◐○

Korean ●○○○○

REFEREES

Prof. Yu-Chee Tseng
@ National Yang Ming Chiao Tung University
✉ yctseng@cs.nycu.edu.tw

Prof. Slo-Li Chu
@ Chung Yuan Christian University
✉ slchu@cycu.edu.tw

PUBLICATIONS

👥 Conference Proceedings

- M.-X. Chen, Y.-C. Tseng, and Y.-A. Chen, "Servi: Structure enhanced regional video inpainting," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Submitted for review, 2024.

- T.-H. Chiang, C.-H. Chang, L.-H. Chen, *et al.*, "Image blending methods for defective pcb image generation," in *2022 IEEE International Conference on Consumer Electronics - Taiwan*, 2022, pp. 261–262. DOI: 10.1109/ICCE-Taiwan55306.2022.9869213.

A DAY OF MY LIFE

Daytime job · Reading (Paper or book) · Friends and Family · Sleep, beautiful sleep · Weight Training · Interest