

Naomi Chen

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🌐 <https://github.com/NYTCEE>

EXPERIENCE

NTUT Circuit Theory - Teaching Assistant

2025 Sep - 2026 Jan

Assisted in three EMI (English as a Medium of Instruction) courses, supporting instructors and students with content understanding and bilingual communication.

MIT City Science Lab @ Taipei Tech - Spring UROP

2025 Feb - 2025 Jun

Engaged in robotics and computer vision research focused on ROS 2, AprilTag detection, and Fusion 360, while contributing to interdisciplinary urban innovation projects.

PUBLICATION

Leveraging SCNet ResNet-50 and MEC-CNN for Efficient Instance Segmentation and Object Detection

2025 *IEEE GEM Conference - Neuromorphic Computing and Artificial Intelligence Circuit Design*

This work combines SCNet-ResNet-50 with MEC acceleration to improve instance segmentation and detection, uniting software optimization and hardware efficiency for scalable deep learning.

PROJECTS

University Course Management System

Developed in C with full account management, including password reset via username or birthdate. Teachers can create courses and generate schedules, while students can manage electives.

Android Mini Arcade App

Developed an Android mini arcade app with multiple game modes and custom settings. Used Render API for backend and Unity for entrance animations to enhance UX.

Interactive Music Box

Personal Website

AprilTag Detection Packages

ACTIVITIES AND SOCIETIES

ZSGH Skateboard Club - President

Filled leadership gap by recruiting a new advisor, hosting a winter camp, and coordinating a 12-school orientation.

NTUT Student Association

- Deputy Speaker of the Student Parliament

Coordinate student-led initiatives, represent student body in administrative meetings, and oversee committee collaboration.

- Chair of the Legal Affairs Committee, Student Parliament

Draft, revise, and review student regulations and proposals, ensure procedural compliance within council operations.

NTUT Programming Club - Member

NTUT Robotics Club - Member

EDUCATION

National Taipei University of Technology

Sep 2022 – June 2026

Bachelor in Electronic Engineering

Taipei Municipal Zhong Shan Girls High School

Sep 2019 – June 2022

SKILLS

Programming Languages

C, C++, Verilog, Python, Java, JavaScript, Kotlin, HTML, CSS, p5.js, C#, SQL, jQuery, PHP, Vue.js, Vite, Node.js

EDA Tools

Cadence : Virtuoso / Innovus / NC-Sim
Synopsys : Verdi / VCS / Laker / Design Compiler & Design Vision / TetraMAX

Development & Engineering Tools

Linux, ROS2, FPGA, OpenCV, PyTorch, AprilTag, NodeRED, MATLAB, MMdetection, Fusion 360, Android Studio, Git

CERTIFICATIONS

GEPT Advanced (CEFR C1)

GEPT High-Intermediate (CEFR B2+)

GSAT English 15/15, Listening Grade A
International Lifeguard and CPR Certified
iPAS Certified Color Planning Specialist
(Issued by Taiwan Ministry of Labor)

OTHER COURSES

Intro to CS, Digital Logic Design & Lab, Electronics I&II, Circuit Theory I&II, Object-Oriented Programming, Computer Organization, Data Structure and Algorithm, Microcomputer Lab, FPGA System Design, VLSI Design, Machine Learning, Bitcoin Economics, Blockchain Applications