# CHANG Yung-Hsuan

**Email**: eiken0525@gmail.com **Phone**: +886 916 969 330

Education National Yang Ming Chiao Tung University Hsinchu City, Taiwan

Applied Mathematics Aug. 2022 – Present

Exchange Program, École polytechnique, France Sep. 2024 – Jun. 2025

## Honors Outstanding Student Overseas Exchange Scholarship

Jun. 2024

Supported by National Yang Ming Chiao Tung University and the Ministry of Education.

#### **Mathematics Presidential Award**

Sep. 2023

Awarded by the Department of Applied Mathematics, National Yang Ming Chiao Tung University for my study in mathematics in the second semester of the 2022 Academic Year.

Honor Student May. 2023

Awarded by National Yang Ming Chiao Tung University for my study in the first semester of the 2022 Academic Year.

#### **Mathematics Presidential Award**

Feb. 2023

Awarded by the Department of Applied Mathematics, National Yang Ming Chiao Tung University for my study in mathematics in the first semester of the 2022 Academic Year.

#### Skills **Programming Languages**

C++ and Python.

## **Spoken Languages**

Mandarin, English (CEFR C1 certified), Japanese (JLPT N2 certified), and French (roughly CEFR B1 level).

#### Projects Study of Hitting Time and Probability

Jul. 2025 - Feb. 2026

## for Random Walks in One and Two Dimensions

College Student Research Project, National Science and Technology Council

Studying the hitting and probability of random walks in one and two dimensions, focusing on their asymptotic behavior, under Prof. CHINO Yuki. Funded by the National Science and Technology Council with project number 114-2813-C-A49-139-M.

#### **Credit Card Fraud Detection Using Machine Learning**

Feb. 2025 - Jun. 2025

Group Project, CSC\_2S004\_EP - Machine Learning, École polytechnique

Developed a machine learning pipeline to detect credit card fraud. See this repository.

## **Chessbot Project: Cagnus**

Nov. 2024 - Jan. 2025

Group Project, CSC\_2S001\_EP - Object-oriented Programming in C++, École polytechnique Built a pure C++ chess engine without any non-standard libraries, achieving a final cross-match ranking of 9th out of 26 in the class. See this repository.

Before Finance Jun. 2024 – Jul. 2024

National Yang Ming Chiao Tung University Applied Mathematics Summer Research Internship, Department of Applied Mathematics, National Yang Ming Chiao Tung University Discussed topics in mathematical finance, including the Gambler's Ruin problem and martingale, under Prof. CHINO Yuki.

# Work Ca Experience Off

#### Camp Counselor

Aug. 2025 (Scheduled)

Office of International Affairs, National Yang Ming Chiao Tung University Leading a two-week program for Japanese university students on language immersion and coding learning, coordinating a 5-student staff and planning students' schedule.

Private Tutor Sep. 2024 – Present

Teaching and mentoring an eighth-grade student in mathematics (UK system), focusing on conceptual understanding and application; creating handouts with Typst.

# **Curriculum Material Developer**

Mar. 2025 - May. 2025

Aijia Tutoring

Created a mathematics handout booklet for junior high second-year students, based on the Taiwan National Curriculum, as a paid private tutoring commission.

#### **Teaching Assistant**

Sep. 2023 - Dec. 2023 & Feb. 2024 - Jun. 2024

Department of Applied Mathematics, National Yang Ming Chiao Tung University
Conducted office hours and marked exams for Calculus A (I) and Calculus A (II) under Prof.
CHINO Yuki.

#### **Academic Tutor**

Oct. 2023 - Nov. 2023 & Apr. 2024 - May. 2024

Center of Teaching and Learning Development, National Yang Ming Chiao Tung University Tutored international students in Calculus A (I) and Calculus A (II), conducting weekly sessions and creating handouts in LTEX.

#### **High-School Math Tutor**

Apr. 2023 - Jun. 2023

Helped a high school student prepare for Taiwan's Advanced Subjects Test (Mathematics A), focusing on problem-solving and exam strategies.

# Volunteering Student Club Instructor

Sep. 2020 - Jun. 2021

Computer Software Design Club, National Hsinchu Senior High School Taught C++ basics (selection structures and number theory) and provided ad-hoc code help during club lab sessions.

## Japanese-Mandarin Consecutive Interpreter

Oct. 2019

Cultural Tourism Section, Zhubei City Office, Hsinchu County Government In Zhubei City Autumn Art Festival, 2019, provided consecutive interpretation of Japanese during performances by the Uchinada Town Municipal Junior High School Wind Ensemble; assisted with translating interviews between Japanese journalists and the Guangming Elementary School band conductor; and conveyed official announcements from Zhubei City Government staff.