Yu-Wei Osmond Lin

- Current High School Student, Class of 2025
- Assertive, Curious, Driven

Contact

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Education

Taipei Municipal Zhonglun High School

Unweighted GPA: 3.88 (10th grade)

Experimental Bilingual Program in 10th grade | 12th Engineering Program

Music and basketball club.

WP Davidson High School

Aug 2023 ~ May 2024

Sep 2022 - June 2025

Unweighted GPA: 4.00 | Weighted GPA: 4.9

Spent my 11th grade in the U.S. with Taipei City Government International HS Exchange Student Scholarship Program.

Experience

Robotics Team

WP Davidson HS

Oct 2023 - May 2024

Programmer, Driver, and Designer

- Built/Designed robot components, such as robot arms and multitools, using Solidworks and programmed robot 10 hours per week for 4 months
- Wrote Robotc program for the robot that includes the basic arcade drive and specialized functions such as autonomous line follower

Research on Primality Tests

Research Assistant

University of South Alabama Nov 2023 - Apr 2024

Project: Comparative Analysis of Primality Testing Algorithms

- Wrote code in python to analyze different primality testing algorithms, finding out the number of pseudoprimes
- Visualize the data using matplotlib and found a pattern for pseudoprimes, discovering that we could reduce the number of pseudoprimes by restricting detected primes to 2 and 3 rough numbers

Model United Nation

WP Davidson HS

North Korea Political Security Delegate

Nov 2023 - Apr 2024

- Researched on North Korea history and events for 2 hours per week for 4 months
- Debated and shared my insights on how Asia is crucial because of chip manufacturing
- Designed puzzles and won the best flag competition

Taiwan EF Cultural Camp Returnee Ambassador

Taipei, Taiwan

Camp Organizer and Staff

Jun 2024 - July 2024

 Organized, reviewed, and strengthened the camp curriculum and arranged the class schedule in a 2-day camp for about 80 students (Working 8hr/day for a week) • Delivered practical English lessons to future exchange students regarding how to write effective emails and learn slangs, preparing them for their exchange year

Courses and Programs

AP Calculus BC (5): Self-studied a first-semester college calculus

AP Chemistry (4): Self-studied a one-year, introductory college general chemistry course

AP Physics C (4): A semester-long, introductory calculus-based college course in physics

AP Computer Science Principles (4): Self-studied an intro college-level computing course

Java Programming: Selective course of introduction to Java programming

BWSI Python Core 2024: The essential concepts of python, pandas, and NumPy **Basics of ASICs:** Basic electrical engineering, semiconductor theory, MOSFET/CMOS **AI Talent Training Program Held by ITRI:** Basic of ML/DL, hackathon, Top 20 students in the after course exam out of 4,000 students

NVIDIA Jetson Nano: Built a deep learning classification project with computer vision models **Harvard Undergraduate Taiwan Leadership Conference**: A large-scale international conference held annually each August at the National Taipei University in Taiwan(last year, over 2,700 Taiwanese students applied for around fewer than 100 spots)

Projects and Skills

Project:

- Robot Line Follower Autonomous System: An autonomous line follower that follows through a white line using the IR sensor with RobotC
- Visualization of Taylor Series: A python program that showcases how more terms of taylor polynomials approaches the original function
- Simulation of Robots on simulink: Utilized simulink to simulate how robots interact with the real world virtually
- <u>RobotC Programming Guide</u>: Co-wrote a thorough RobotC Programming Guide for beginners and robotics peers, including how to set up motors and sensors and a full sample program

Language: Native in Chinese: Proficient in English (7.5 on IELTS)

Programming: Advanced Python, Intermediate Java, C++, MATLAB simulink

CAD: SOLIDWORKS and onshape

Field of Interest

Deep & Machine Learning, Quantum Computing, ASICs, Robotics, R&B and Classical Music

Certification







