

CHEAH HAO YI / 谢皓恠

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EDUCATION

National University of Singapore (NUS) Jul 2021 - Jul 2025
Bachelor of Engineering, Computer Engineering

- NUS ASEAN Merit Scholarship, Honours
- Second Major in Business, Specialization in IoT, Specialization in Robotics, Minor in Economics

Technical University of Denmark (DTU) Jan 2024 - May 2024
Erasmus Programme

- VLSI design, Reinforcement Learning and Control, Model-based Machine Learning

CERTIFICATIONS

- Bluetooth Low Energy (BLE) Fundamental - Nordic Semiconductor
- Video AI Application at the Edge on Jetson Nano - Nvidia

WORK EXPERIENCE

Software Engineer, Espressif Systems (Czech Republic) May 2024 – August 2024

- Integrated a compression algorithm component to the ESP registry to reduce binaries by up to 5%
- Authored 2 articles for the Espressif Developer portal (tinyurl.com/esp-wifi)

Software Engineer, Espressif Systems (Singapore) May 2023 – December 2023

- Contributed to the Espressif Open Source Repository, ESP-IoT Development Framework
- Developed new BLE and Over The Air Update code examples for the ESP-IDF repository
- Prototyping and testing of software on ESP Dev Kits and HMI solutions
- Conducted ESP32 workshops for up to 50 students at NUS, NTU, and SUTD

Teaching Assistant, National University of Singapore August 2022 – Present

- Taught CS2113/T - Software Engineering and Object Oriented Programming in Java to a class of 12 students and supervised a team of 4 on course team project
- Taught IT5003 - Data Structures and Algorithms in Python to a class of 25 Master Graduate students and Adult Learners, under the guidance of Professor Steven Halim

ADDITIONAL INFORMATION

- Proficient in English, Chinese and Malay (Written and Spoken)
- Proficient in C/C++, Python, Java; Experience in Verilog and VHDL
- Familiarity with wireless protocols such as 802.11a/g/n/x, Bluetooth classic, BLE, MQTT
- Experience with Python data visualization and numeric processing frameworks such as Matplotlib, Numpy, Pandas and Pytorch
- Hands-on experience with Computer Vision Algorithm such as ViT, and YOLO
- Work on personal projects such as home automation and portfolio regression analysis