

TAN WEI QIANG BENJAMIN

+65 8145 6842 | benjamin.tan@outlook.sg | <https://www.linkedin.com/in/tanweiqiang/> | <https://btwg97.github.io/>

EDUCATION & QUALIFICATION

Bachelor of Engineering (Electrical Engineering), National University of Singapore (NUS) **AUG 2018 – JUN 2022**
Grade: **Honours (Distinction)**; Specialisation: **Internet of Things**.

RELEVANT CERTIFICATIONS / AWARDS

Cisco Certified Network Professional Enterprise (CCNP Enterprise) **JUN 2024**
Cisco Certified DevNet Associate **JAN 2024**

WORK EXPERIENCE

Cisco Systems, Inc. – Customer Experience, Singapore

Consulting Engineer (Network)

JUL 2023 – PRESENT

- Cisco ASEAN Customer Experience Graduate Program (CXGP) participant.
- Cisco TAC rotation exposure (routing, switching).
- Project based rotation exposure (enterprise, data centre, on-premises infrastructure).
- Technologies: BGP, OSPF, MPLS, ACI, SD-WAN, SDA Wireless, Python automation.

Government Technology Agency (GovTech) – Smart City Technology Division, Singapore

System Software Engineer (I)

JUN 2022 – JUL 2023

Access@Gov

- (Pilot) A whole-of-government initiative to streamline visitor management system.
- Primarily working on the backend (e.g., business logic layer) and on-premises services (e.g., edge devices).
- Technologies used: NestJS, Hashicorp Vault, MongoDB, Docker, GitLab CI/CD.

Employee Management System

- An in-house product that integrates with third-party facial recognition and card access systems to improve workflow by reducing the number of times needed for manual entry and the automated removal of access rights via a scheduling service.
- CI/CD pipelines using Jenkins and containerisation using docker.
- Technologies used: Flutter (Web), NodeJS, Express, MongoDB, Docker, Jenkins.

INTERNSHIP EXPERIENCE

Sustainable Living Lab, Singapore

AI4Youth Program Trainer

AUG 2021 – FEB 2022

- Taught students to program AlphaMini robot using the “Alpha Mini” mobile application.
- Promoted youth’s interests in Artificial Intelligence via hands-on projects e.g., image classification of Hand Gestures.
- Technologies used: Sci-kit Learn, Tensorflow, OpenCV, Jupyter.

Hydroleap Private Limited, Singapore

Internet of Things Engineer Internship

MAY 2021 – JUL 2021

- Developed an in-house Python script to act as a Gateway to stream data from edge sensors to the cloud over ModbusTCP.
- Maintained a time-series database using AWS Timestream Cloud.
- Visualisation of time series data and alerts page over a dashboard created using AWS QuickSight and Grafana.
- Technologies used: Python, AWS Web Services.

Resync Technologies Private Limited, Singapore

Internet of Things Engineer Internship

MAY 2020 – DEC 2020

- Symmetrical key cryptography using the AES 128 standard to securely transfer data from edge devices to the cloud.
- Wrote Python script to automate email subscription service to alert clients of any anomaly in the data points collected.
- Testing and installation of smart sockets and smart energy meters on-site.
- Technologies used: SSH, MQTT, HTTPS API, C++, Python.

LEADERSHIP EXPERIENCE

AIESEC in NUS, Singapore

Team Leader, Global Information Session 2019

SEP 2019

Planned and executed marketing strategies to promote AIESEC Volunteering Projects to the NUS student body.

Team Leader, August Recruitment Organising Committee 2019

JUN 2019 – AUG 2019

- Negotiated with external companies for product and cash sponsorships.

Engin’ Club, Singapore

Head of Programs, Engin’ O’Week 2019

MAY 2019 – JUL 2019

- Oversaw 3 sub-groups and executed a freshmen orientation camp with over 900 participants.