TAN WEI QIANG BENJAMIN

Detail-oriented engineer experienced in network infrastructure, backend development, and automation. Proven track record in design and implementation of scalable solutions and managing stakeholder relationships.

EDUCATION & QUALIFICATIONS

Bachelor of Engineering (Electrical Engineering) with Specialisation in Internet of Things (IoT). National University of Singapore (NUS), Honours (Distinction), AUG 2018 – JUN 2022

CERTIFICATIONS & AWARDS

- Cisco Certified Network Professional Enterprise (CCNP Enterprise).
- Cisco Certified DevNet Associate.

TECHNICAL SKILLS

- Programming: Python, JavaScript, TypeScript.
- Networking: Routing, Switching, Software Defined Networking, Automation.

WORK EXPERIENCE

Cisco Systems – Customer Experience, Singapore Consulting Engineer (Network), JUL 2023 – PRESENT

- Participant of Cisco ASEAN Customer Experience Graduate Program (CXGP).
 - Went through 24/7 Cisco Technical Assistance Centre (TAC) under routing and switching team.
 Assisted customer with their network issues through email and WebEx troubleshooting.
- Shadowed complex projects for major accounts in Enterprise and Data Centre Networks.
 - o Real-time CCTV Multicast (IGMP, PIM-SM, MSDP) Network, Large Campus Provisioning (OSPF, Etherchannel), ACI Fabric Setup, Python Automation.
- Led in small projects involving customer requirements gathering, stakeholder management, network planning, and network implementation.
 - Wireless site survey using Ekahau, SDA Wireless AP provisioning, ACI firmware upgrade and hardware replacement.
- Technologies: BGP, OSPF, Multicast, Clos Architecture, Python Automation, Troubleshooting.

Government Technology Agency (GovTech) – Smart City Technology Division, Singapore System Software Engineer (I), JUN 2022 – JUL 2023

- Developed backend system and on-premises services for Access@Gov, a whole-of-government visitor management initiative.
 - Streamlined manual processing and approval time through backend optimizations and automation.
 - o Technologies: NestJS, Hashicorp Vault, MongoDB, Docker, GitLab CI/CD.
- Enhanced existing Employee Management System by integrating with third-party facial recognition and card access systems.
 - o Automated access rights management, reducing manual entry by 50%.
 - o Technologies: Flutter (Web), NodeJS, Express, MongoDB, Docker, Jenkins.
- Developed VAPT-compliant code base in accordance with Singapore's IM8 Security Policies.

INTERNSHIP EXPERIENCE

Hydroleap Private Limited, Singapore

Internet of Things Engineer Intern, MAY 2021 – JUL 2021

- Developed a Python-based Gateway to stream data from edge sensors to the cloud over ModbusTCP.
- Maintained AWS Timestream Cloud time-series database and created dashboards using AWS QuickSight and Grafana.
- Technologies: Python, AWS Web Services.

Resync Technologies Private Limited, Singapore

Internet of Things Engineer Intern, MAY 2020 - DEC 2020

- Implemented AES-128 encryption for secure data transfer from edge devices to the cloud.
- Automated email alerts for data anomalies using Python scripts.
- Conducted on-site testing and installation of smart sockets and energy meters.
- Technologies: SSH, MQTT, HTTPS, API, C++, Python.

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