

OOI SEAN HONG

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Portfolio: www.sean-hong.dev

WORK EXPERIENCE

TBUN Institute of Technology

AI Engineer (Intern)

APR 2026 – Present

Remote

- Engineered a production-grade WhatsApp automation system using n8n, Teable, and JavaScript to seamlessly manage webinar registrations and send automated reminders to attendees.
- Developed an intelligent follow-up workflow that monitors webinar attendance, automatically messages absentees, and allows them to seamlessly re-register for future sessions using conversational WhatsApp commands.

HAVVA Agrotech Sdn Bhd

Smart Automation Engineer

SEP 2025 – DEC 2025

Penang, Malaysia

- Streamlined daily operations by creating an automated scheduling pipeline. Connected Google Sheets and Apps Script to an OpenAI-powered n8n agent, which automatically generated and distributed personalized daily task templates to operators via WhatsApp.
- Built a custom smart-switch system for exhaust fans by programming ESP8266 microcontrollers. Developed a React-based web application connected via Node-RED to allow operators to control fans manually or set automated schedules.
- Architected a comprehensive IoT monitoring system by integrating Seeed Studio SenseCAP sensors and LoRaWAN gateways, utilizing Node-RED and MQTT to process environmental data and visualize it via InfluxDB and Grafana dashboards.

HAVVA Agrotech Sdn Bhd

Software Developer (Intern)

JUN 2025 – AUG 2025

Penang, Malaysia

- Led the enterprise migration of the chatbot infrastructure to Microsoft Azure, transitioning to Azure OpenAI (GPT-4o), deploying MongoDB vector databases, and managing code deployment using Azure DevOps and Azure VMs.
- Spearheaded the R&D of an AI-powered WhatsApp chatbot designed to handle customer service inquiries and reduce the team's support workload using Python, LangChain, and Retrieval-Augmented Generation (RAG).
- Built the initial prototype using local models (DeepSeek/Qwen) and ChromaDB to securely parse internal company documents, testing the chatbot via Meta Developer API and Ngrok.

EDUCATION

UOW MALAYSIA KDU PENANG UNIVERSITY COLLEGE

Diploma in Information Technology

MAY 2023 – SEP 2025

Penang, Malaysia

- **Cumulative GPA: 3.30**
- **Programming Coursework:** Object-Oriented Programming, Data Structure & Algorithms, Computer Architecture, Intro to Operating System, System Administration, Ethical Hacking

WAWASAN OPEN UNIVERSITY

Bachelor's Degree in Software Engineering

JAN 2026 – Present

Penang, Malaysia

- **Major:** Application Development

CERTIFICATION

LEAD

Professional AI Engineering

FEB 2025

- **Skills:** Prompt Engineering, Retrieval Augmented Generation (RAG), Fine-Tuning

TECHNICAL SKILLS

Programming Languages: Python, HTML/CSS, JavaScript, SQL, C++,

Developer Tools: AWS, Azure, Git, n8n, Postman, NodeRED, InfluxDB, ChromaDB, MongoDB, Grafana

Libraries/Frameworks: ReactJS, NodeJS, PostgreSQL, Langchain