



SWAM HTET WINT YEE

Computer Engineering diploma candidate
focused on Embedded systems, IoT Integration,
Applied AI, and System Testing.

CONTACT ME

- +65 91863811
- swamhtetwintyee@gmail.com
- swam-htet-wint-yee-66b14a299
- <https://github.com/swammie>

EDUCATION

Diploma in Computer Engineering

Temasek Polytechnic

2023-Current
(Graduating in May 2026)

TECHNICAL SKILLS

- Programming**
(Java, Python, C/C++, JavaScript and SQL)
- Web Development**
(HTML, CSS, Java Script and PHP)
- Electronics and Microcontroller**
- Data Visualization** (KNIME & Tableau)
- Intelligent Automation** (UiPath)
- Artificial Intelligence & Machine Learning**
- Internet of Things**
(Raspberry pi, MQTT, Grafana/InfluxDB)

SOFT SKILLS

- Problem-solving and Critical Thinking
- Team Collaboration
- Attention to Detail
- Adaptability and Fast-Learning

AWARDS

School of Engineering Director's List Award
(Temasek Polytechnic) 2024

PROFESSIONAL EXPERIENCE

Engineering Assistant Intern

Apr- Aug (2025)

OSIM Headquarters (Mechanical Technology Department)

- Converted massage program sheets into c-based firmware logic by translating sequences and constraints into structured control flow, improving implementation accuracy.
- Validated firmware updates through hands-on testing (timing, behavior, safety) and documented issues for engineering review, accelerating fix verification.

ACADEMIC PROJECTS

Smart Aqua Grow (IoT + AI pest detection system) 2025-2026

- Built a **LoRa**-based sensor pipeline that transmits and stores 4 sensor readings every 5 seconds via a gateway and database logging, enabling real-time dashboards and historical trend analysis.
- Trained and deployed a **YOLO**-based pest object detection model achieving **89%** precision, then automated inference and annotated output generation to improve monitoring speed and detection consistency.

Integrated Circuit (IC) Tester Monitoring System

2025

- Engineered a temperature sensing and fan control subsystem by integrating sensor signal conditioning with driver logic and threshold-based alarms, improving cooling responsiveness during test cycles.
- Developed an **MQTT**-enabled HMI to display temperature, fan status, and alarm events in real time, improving fault visibility and shortening troubleshooting time.

Traffic Light System (Microcontroller)

2025

- Programmed a microcontroller finite-state machine to execute timed traffic light sequences with correct transitions and safety timing, validated through hardware testing and iterative tuning.
- Implemented clean modular logic for timing and state control to support scenario changes.

REFERENCES

Available upon request