

Contact

williambubuwybb@gmail.com

www.linkedin.com/in/waiyanbobo
(LinkedIn)

Top Skills

Production Management

Project Planning

Integrated Circuits (IC)

Certifications

Standard First Aid Course

ASCA Level 2: The Strokes School
(International)

The 7 Habits of Highly Effective
College Students

Kubernetes Fundamentals

Docker Fundamentals

Wai Yan Bo Bo

Year 3 Computer Engineering Student at Singapore Polytechnic |
Embedded Systems & Software Development | Tech Enthusiast
Singapore, Singapore

Summary

I am a passionate and results-driven Computer Engineering student with a strong foundation in both hardware and software integration. My areas of interest lie in embedded systems, machine learning, and innovative software design, and I am dedicated to developing cutting-edge solutions to real-world problems.

Most recently, I applied these skills during my internship at Shimano (Singapore), where I engineered a full-stack diagnostic system for factory machinery. I developed AI computer vision triggers using Python and YOLOv8 to detect machine errors, containerized the application using Docker for Nvidia Jetson platforms, and integrated HMI systems for industrial control.

Key Technical Skills:

Programming: C++, Python, Java, PHP, JavaScript, HTML, CSS.

Hardware: Microcontrollers (Arduino, STM32), Embedded Systems (Raspberry Pi, Nvidia Jetson), IoT Development.

Software & Tools: Android Studio, Docker, HMI Design, Data Analysis.

Beyond my technical skills, I am an experienced leader and collaborator. As an ExCo member of the Singapore Polytechnic Swim Team and a former Student Union leader at Yangon Technological University, I have strong skills in project management, communication, and teamwork.

Experience

Singapore Polytechnic

Swim Team Exco

March 2024 - Present (1 year 11 months)

Singapore

- Oversee swimmer recruitment and admissions, fostering an inclusive and supportive team environment.
- Manage the procurement, maintenance, and inventory of team training equipment.
- Coordinate logistics and planning for inter-school competitions and internal trials.
- Organize team-building initiatives to promote a positive and cohesive team culture.

Managing team recruitment and logistics has sharpened my leadership and communication abilities. By fostering an inclusive environment and organizing events, I have learned how to bring people together and solve problems collaboratively.

Quattor Swim School

Swim Coach

October 2023 - Present (2 years 4 months)

Singapore

Help students build water confidence and master essential swimming skills

Instruct swimmers of all ages and skill levels, from beginners to higher levels

Collaborate and communicate with other coaches for the teaching programs and trainings

Coaching students of all ages has refined my patience and adaptability, teaching me how to communicate complex ideas clearly to build trust. Additionally, collaborating with fellow coaches on training programs has strengthened my teamwork and peer-management skills.

Shimano (Singapore) Pte Ltd

Production Engineering Intern

March 2024 - August 2024 (6 months)

Singapore

Engineered and deployed a full-stack diagnostic and video monitoring system for factory machinery.

Developed AI computer vision triggers using Python and YOLOv8 to automatically detect and record machine errors.

Containerized the application using Docker for deployment on an Nvidia Jetson Nano platform.

Assisted in programming and calibrating a large-scale automated inspection machine.

Programmed and integrated a Human Machine Interface (HMI) for machine control using industrial software (GX Work3, GT Designer3).

Gained hands-on experience with industrial hardware, including PLC programming, sensor calibration, and actuators.

Designing Human Machine Interfaces (HMI) and deploying diagnostic systems allowed me to bridge the gap between complex code and human operators. Integrating these solutions in a live factory environment further honed my ability to collaborate with cross-functional teams and communicate technical constraints effectively.

Yangon Technological University

Student Union Member

2019 - 2020 (1 year)

Yangon, Myanmar

Awarded the "Most Outstanding Volunteer" certificate (2019) for dedicated contributions to the student community.

Served on the Information Team, responsible for the official photographic records of major events, seminars, and conventions.

Contributed to the Master Plan Team, planning and supervising the renovation and restoration of academic buildings on campus.

Acted as an internal auditor for the IT Students' Association Information Team.

Volunteering across diverse functions—from campus renovation planning to event photography—taught me to adapt quickly to different team dynamics.

This exposure developed my negotiation skills and ability to manage diverse stakeholder interests while serving the wider student community.

Myanmar Swimming Federation

Regional Swimmer

2012 - 2018 (6 years)

Yangon, Myanmar

Competed in multiple regional and national-level swimming competitions.

Preliminarily selected for the 27th SEA Games (2013) after achieving qualifying times and being shortlisted to represent Myanmar.

Mastered discipline and time management by balancing a rigorous daily training schedule with academic responsibilities.

Competing at a high level instilled deep discipline and emotional regulation, teaching me to perform reliably under pressure. Balancing elite-level training with academics further developed my time management, ensuring I remain a consistent and resilient contributor in any team setting.

Education

Singapore Polytechnic

Diploma in Computer Engineering · (April 2023 - March 2026)

Yangon Technological University

Computer Engineering and Information Technology · (December 2018 - March 2020)