

Jun Wei Woon

SECURITY ENGINEER AT SINGTEL

Singapore

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Computing Science student at Singapore Institute of Technology (SIT) and Security Engineer Intern at Singtel with hands-on experience in cybersecurity, threat analysis, incident response, and system defense. Skilled in cryptography, reverse engineering, SIEM, and automation for security operations.

Key Skills

Programming

PYTHON, C, R, JAVA, SQL, BASH, RUST, C#

Cybersecurity

CRYPTOGRAPHY, REVERSE ENGINEERING, MALWARE ANALYSIS, NETWORK SECURITY, INCIDENT RESPONSE, SIEM, SOAR, THREAT HUNTING, VULNERABILITY ASSESSMENT, PENETRATION TESTING

Networking & Traffic Analysis

TCP/IP, FIREWALL CONFIGURATION, IDS/IPS, WIRESHARK, SNORT, PFSENSE

Cloud & DevSecOps

CONTAINER SECURITY, DOCKER, KUBERNETES, INFRASTRUCTURE AS CODE, CI/CD SECURITY

IoT & Embedded Systems

RASPBERRY PI, ESP32, ARDUINO, ROS, EMBEDDED SYSTEMS SECURITY

Version Control & Automation

GIT, BASH SCRIPTING, PYTHON AUTOMATION

Employment

Security Engineer SHINE Intern

Singapore Telecommunications Ltd
(Singtel)

TECHNOLOGY AND SERVICE ASSURANCE

September 2024 -> Present

- Developed and optimized SIEM-SOAR workflows, implementing automated data transformation pipelines to standardize log formats, reduce processing time, and enhance threat detection accuracy.
- Engineered scalable automation to reduce redundant alerts and enhance threat detection.
- Collaborated cross-functionally with security engineers and analysts to integrate adaptive log parsing mechanisms, ensuring seamless ingestion of heterogeneous log sources while maintaining data integrity.

Armament Technician Specialist

Singapore

SINGAPORE ARMED FORCES

July 2020 -> July 2022

- Performed maintenance and repair of armament and C4 systems for Hunter Armoured Fighting Vehicles, ensuring operational readiness.
- Led a team of 7-10 technicians in daily vehicle maintenance, troubleshooting, and mission-critical repairs under high-pressure environments.

Student Intern

Cyber Test Systems

CYBER TEST SYSTEMS

November 2019 -> February 2020

- Conducted malware analysis on 32-bit Portable Executable (PE) files, leveraging reverse engineering techniques to identify malicious behaviors and threats.
- Performed log analysis using Security Information and Event Management (SIEM) platforms, developing threat signatures for detecting cyber attack vectors such as brute force, phishing, and malware infections.
- Engineered a GPS-based Network Time Protocol (NTP) server using Raspberry Pi, ensuring precise time synchronization for secure network operations.
- Deployed and configured a Hybrid Cyber Range infrastructure, implementing critical services including SMB file sharing, DNS, and NTP to simulate real-world cyber environments for security testing.

Administrator

Coursemology.sg

OLYMPUS LEARNING ACADEMY

February 2019 -> March 2019

- Managed website content and created new course pages, ensuring seamless user experience and navigation.
- Executed digital marketing strategies, including email marketing, automation, and SEO optimization to enhance online visibility.
- Provided front-line customer service and administrative support, streamlining operations and improving client engagement.

Publications

1. Woon, J. W., Sheng Jovian, L. H., Choon How, B. L., Richie, W. R., Yuan, P. X., Abhishek, N. V., & Bin Abbas, M. F. (2024). Multi-protocol wireless mesh sensor network. *2024 IEEE VTS Asia Pacific Wireless Communications Symposium (APWCS)*, 1–6. <https://doi.org/10.1109/APWCS61586.2024.10679304>

Education

Singapore Institute of Technology, University of Glasgow

Singapore/Glasgow

BSC (HONS) COMPUTING SCIENCE

2022 -> 2025

- Cumulative Grade Point Average: 4.73/5
- Provost List AY2023/2024 (Top 2% of cohort)
- Singtel SHINE Apprentice
- Code Olympics 2024 (Participant)

Nanyang Polytechnic

Singapore

DIPLOMA IN CYBER SECURITY AND FORENSICS

2017 -> 2020

- Cumulative Grade Point Average: 3.37/4
- Diploma Plus: Linux System Essentials

Awards and Certifications

CERTIFICATIONS

Offensive Security Certified Professional

Offensive Security

OSCP

In Progress

Google Cyber Security

Coursera

GOOGLE CYBER SECURITY CERTIFICATION

2024

Amazon Web Services (AWS)

AWS

AWS ACADEMY CLOUD FOUNDATIONS

2023

Docker

VMware

DOCKER FUNDAMENTALS

2023

Kubernetes

VMware

KUBERNETES FUNDAMENTALS

2023

JPMorgan Software Engineering Virtual Experience on Forage

JPMorgan Chase & Co.

USED PERSPECTIVE DATA VISUALIZATION SOFTWARE AND PYTHON TO MONITOR STOCK PRICE TRENDS AND CREATE TRADING STRATEGIES.

October 2022

Projects

Cybersecurity Capture the Flag (CTF) Competitor

Singapore

ETHICAL HACKING & VULNERABILITY ANALYSIS

2025

- Engaged in hands-on security challenges to identify vulnerabilities, exploit weaknesses, and implement defensive measures across web, network, and binary exploitation domains.
- Competed in high-profile CTF events, specializing in forensics, OSINT, cryptography, and cloud security. Platforms: Hack The Box (HTB), TryHackMe (THM), PortSwigger. Competitions: IrisCTF, StandCon, CyberLeague.

Multi-Protocol Wireless Mesh Sensor Network

Singapore Institute of Technology

IoT PROTOCOLS

2024

- Designed and implemented a Wireless Sensor Network (WSN) with embedded systems, enabling seamless switching between ESP-NOW and LoRa protocols for adaptive communication.
- Conducted performance testing and data collection to evaluate protocol efficiency, network latency, and reliability in dynamic environments.
- Authored and published a research paper detailing the architecture, implementation, and findings of the WSN, contributing to advancements in IoT and wireless communication.

Home Lab

Singapore

PERSONAL LAB FOR R&D

2022

- Deployed and configured a pfSense-based router/firewall to enhance network security and implement DevSecOps services.
- Set up and managed a TrueNAS server for secure data storage, redundancy, and network-attached storage (NAS) solutions.
- Implemented a Docker server for containerized application deployment, testing, and research in cybersecurity and automation.