



# DYLON CHUNG YEE WONG

Malaysia | +6010-3520010

[dylonwcy@gmail.com](mailto:dylonwcy@gmail.com) | [LinkedIn](#) · [GitHub](#)

I am a postgraduate with a passion for cyber security and back-end development. I undertake my tasks with responsibility and ensure they are completed with high quality. I am always willing to learn new things.

## EDUCATION

SEPTEMBER 2022 – SEPTEMBER 2023

### MSC ADVANCED COMPUTER SECURITY, UNIVERSITY OF MANCHESTER

- **Current Result:** First Class Honours
- **Courses:** Cryptography, Network Security, System Governance, Automated Reasoning, Software Security.

SEPTEMBER 2019 – JUNE 2022

### BSC COMPUTER SCIENCE (SECURITY AND RESILIENCE), NEWCASTLE UNIVERSITY

- **Final Result:** First Class Honours
- **Courses:** Cryptography, System and Network Security, Information Storage, Machine Learning, Predictive Analysis, Computer Vision.

## EXPERIENCES

JANUARY 2024 – PRESENT

### Full Stack Developer, AGSmart IT Sdn Bhd

- Develop and maintain payment gateway solution that supports most Malaysia mainstream banks, DuitNow QR and web3.
- Develop and maintain customised dashboard with reporting and analysis tools.
- Uses Laravel (PHP), TypeScript and Python for backend; React (Next.js, Tanstack, Tailwindcss...), Laravel Blade (PHP + HTML + JavaScript) for frontend.
- Manages cloud deployment with popular providers like AWS, Vultr and Digital Ocean.
- Utilises container orchestration tools such as Docker and Kubernetes. Automates the deployment using Ansible.
- Manages data storages and Database using PostgreSQL and AWS S3 buckets. Automates regular backup data regularly on PostgreSQL replicas.
- Engage with clients to improve application and resolve any issues encountered by the clients.

AUGUST 2023 – OCTOBER 2023

## **Freelance Backend & Blockchain Developer, Moonkite Sdn Bhd**

- Developed a blockchain-based system as a proof-of-concept for a certificate issuance service
- Implemented RESTful API and gateway connection to the Hyperledger Fabric blockchain in Golang
- Setup docker environments to simulate the transaction processes

## **PROJECTS**

### **DISCORD BOT – BILI-BOT**

- A Discord bot hosted on Heroku to play audio upon Discord user's request.
- Written in **TypeScript** and **Node.js v16**.
- Perform **async HTTP requests** via the video server's **RESTful API** and pipe audio stream to the Discord voice channel.
- Securely stored data in a **NoSQL database (MongoDB)** for request caching.

### **FDM Group Gamification**

- Led a team of 4 to develop a web application based on the **Spring Boot** framework of **Java**.
- Designed quizzes relating to Business Intelligence, Technical Operation and Software Testing to improve student's learning experience.
- Took account of vulnerabilities like SQL injection, XSS, LFI and XXE during development.
- Wrote a 3000-word detailed technical report on the project.

### **Animal Shelter Decentralised Application**

- Developed a decentralized web application using **Solidity** and **React**.
- Written in **Solidity** and **JavaScript**.
- Implemented trackable secure pet adoption and monetary donation features.
- Prevented abuse of the system by enforcing a deposit upon an adoption request.
- Allowed transparency of statistics and improved privacy of users by enabling anonymous adoption requests.

### **Blockchain-Based Federated Learning Intrusion Detection System**

- A collaborative intrusion detection system that is built on the Hyperledger Fabric blockchain network.
- Written in **TypeScript** and **Python**.
- Uses a **BiLSTM** model to predict network attacks from network traffic packets.
- The predictions from individual participants are aggregated into a global model using the Federated Averaging algorithm.
- Data are secured by **TLS** communication and Hyperledger Fabric architecture.

### **ESBMC-Solidity - Contributor**

- Led a team of 3 to contribute 28 file changes which passed the tests with expected results.
- Extended the static analysis tool using **C++**.
- Extended the program to support more return types and correctly detect errors for inherited classes.
- Identified and reported more issues to improve the program.

# **SKILLS**

## **PROGRAMMING**

- **Language:** Python, Java, JavaScript, Typescript, Go, C, C++, PHP
- **Database:** MySQL, PostgreSQL, NoSQL (S3, MongoDB)
- **Others:** Logic programming, Automated Reasoning (SAT, SMT)

## **LINUX**

- Kali Linux and Ubuntu
- Bash and shell scripting
- GUI tools: BurpSuite, Wireshark, Ghidra
- Command-line Interface tools: nmap, tshark, john-the-ripper, sqlmap, radare2, wfuzz, Metasploit etc.

## **ACADEMIC SKILLS**

- **Fast learner**
- Teamwork and communication
- Resilience and tenacious
- Creative and innovative

## **LANGUAGE**

- Chinese Mandarin (Native)
- English (Fluent)
- Bahasa Melayu (Fluent)

# **EXTRA-CURRICULAR**

**2019 – Present**

## **TRYHACKME.COM**

I am an active member of this popular cybersecurity learning website. I am currently ranked **top 1%** across the server, where scores are awarded by room completion. The rooms are short courses that teach a wide array of cybersecurity knowledge. The rooms are constantly updated with the current security trends and provide me with practical Capture The Flag challenges.

**2018 – 2019**

## **PEER TUTOR, INTO NEWCASTLE**

This experience involved serving as a mentor to incoming students. I provided guidance on solving mathematical questions and strategies to tackle similar questions. Through this experience, I honed my leadership and communication skills.