

Student developer with 7 years of experience in software and web development - a curiosity monster who loves touching and experimenting with new technologies and implementing them in practice. Take a masochistic delight in challenging self to expand the area of expertise and deepen the skills. My current topic of interest and my aspiring research topic is the unity of Deep Learning and Cyber-security

Education

Monash University

Melbourne, Australia

BACHELOR OF COMPUTER SCIENCE ADVANCED (HONOURS)

Feb. 2022 - Present

- Currently pursuing (First year)
- Majoring in Computer Networks and Security
- Member of MonSec (Monash University Cyber Security Club)
- Anticipated graduation: Dec 2025

Dulwich College Suzhou

Suzhou, China

INTERNATIONAL BACCALAUREATE

Sep. 2013 - Jun. 2021

- Completed International Baccalaureate diploma
- Media Prefect (2020-2021)

Experience

Research Assistant (C# Programmer)

Remote, Australia

MONASH UNIVERSITY CYBERSECURITY RESEARCH GROUP & THE LEGION OF THE BOUNCY CASTLE INC.

Apr. 2022 - Present

- Developing a C# implementation of post-quantum lattice-based public-key cryptography algorithm to add to the Bouncy Castle library
- Currently assigned/developing the implementation of NIST PQC Round 3 NTRU Prime/NTRU algorithms in C#

Skills

DevOps Docker, Kubernetes, Git, Prometheus, Travis CI, GitHub CI/CD/Actions

Programming C++, Rust, Python, Java, PHP, JavaScript, Node.js, C# | DB: MySQL, PostgreSQL, SQLite, MongoDB, Redis

Operating Systems Fedora, Kali Linux, Ubuntu, macOS, Windows 10, CentOS, OpenSUSE

Activities

2022 Apr **Workshop Leader**, MonSec XXE Web Exploit Workshop

MonSec

2022 Apr **Plaid CTF 2022 (Solo)**, Web Exploitation

Plaid CTF, Online

2022 Apr **RITSEC CTF 2022 (Team)**, Web Exploitation, Binary Exploitation, Cryptography

RITSEC CTF, Online

2022 Apr **UMassCTF 2022 (Team)**, Web Exploitation

UMass CTF, Online

2022 Mar **MonSec CTF (Team)**, Web Exploitation, Binary Exploitation, Cryptography, Forensics, OSINT

MonSec, Monash

2022 Mar **picoCTF (Solo)**, Cryptography, Reverse Engineering, Binary Exploitation, Web Exploitation, Forensics

picoCTF, Online

2022 Feb **Participant**, UNIHACK Hackathon, Project: Decentralised Social Media

Australia,

Melbourne

2020-2021 **Prefect**, Dulwich College Suzhou - Media Prefect

China

2018 **Staff/Workshop leader/teacher**, Dulwich College Suzhou Hackathon - Python workshop

China

2018 **Participant**, Dulwich College Shanghai Hackathon

China

2017-2020 **Web Developer | Server Administrator**, Elegant365 Project

China

2017 **Participant**, GTE entrepreneurship camp/competition

Japan

Honors & Awards

2022 **Black Hat Asia 2022 Student Scholarship (SGD \$799)**, Black Hat

Singapore/Online

2021 **International Study Grant (AUD \$10,000)**, Monash University Scholarship

Monash University

Projects

finman

C++

- Command-line finance manager built using C++
- Uses SQLite as a database

[GitHub](#)

Jan. 2022 - PRESENT

Sequence Analyser

C

- Simple and fast Sequence analysis tool (DNA/RNA) based on Aho-Corasick algorithm
- Inputs a sequence and a pattern, outputs the number of occurrences of the pattern in the sequence

[GitHub](#)

Jan. 2022 - PRESENT

UnciaNet

NODEJS, JAVASCRIPT, REDIS

- Fully featured Blockchain network with NodeJS and Redis backend
- NodeJS REST API made for creating transactions, Redis Pub/Sub for announcing blocks
- Currently under development to transform into blockchain visualisation/learning tool

[GitHub](#)

Dec. 2021 - PRESENT

KeySort

RUST

- Small command-line utility to sort files and folders into character assigned folders
- Built efficiently with Rust

[GitHub](#), [Cargo](#)

Nov. 2021 - PRESENT

EqManage

PHP, HTML, CSS, JAVASCRIPT, MYSQL

- Client: Dulwich College Suzhou
- Equipment (Renting) management system
- Users can rent equipment, set renting period + message. Admins can approve or deny the request. Includes dashboard, overdue tracking etc...
- (With MySQL as a database and PHP + Javascript for backend)

[GitHub](#)

Oct. 2019 - Jan. 2021

cocoon

POEDIT, PHP, CSS, JAVASCRIPT, HTML

- Pull request contribution to opensource project: yhira/cocoon
- SEO optimised WordPress theme
- Mainly contributed the translation that was then pushed to the official branch in the main repository
- Few tweaks made to the theme for personal use

[GitHub](#)

Oct 2021 - Present

Tower defense game

C# (UNITY), CINEMA 4D

- Tower Defense Game built using Unity
- Single player game, where the player defends endpoint from incoming enemies. All elements including the tower design were solo developed

Jan. 2018

Chatbox

PHP, MYSQL, HTML, CSS, JAVASCRIPT

- Chatroom where multiple users can chat with each other, with online status, and chat history. Similar to Discord

Jul. 2016

Certifications

2022 Feb **Cybersecurity Fundamentals**, No expiration date

[IBM SkillsBuild](#)

2022 Feb **NSE 1 Network Security Associate**, Expires Feb 2024

[Fortinet](#)

Personal Interests

Personal Server

DOCKER, KUBERNETES, SERVER ADMINISTRATION

- Hosting services on both VPS (Vultr & Hetzner) and personal server using Docker and orchestrated using Kubernetes
- Reverse proxy, SSL certificate, intrusion detection, access control, and other basic networking security/configuration applied

[Server](#)

2018 - PRESENT