

JOSHUA APOLLO

AVAILABILITY: 25TH MAY TO 25TH DECEMBER

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[Linkedin](#) [link]

[Portfolio Website](#) [link]

Computer Engineering student specialising in cybersecurity, offensive security, and AI security. Hands-on experience in penetration testing, red teaming, vulnerability research, and building AI-driven systems with security baked in. Strong communicator with international CTF and competitive debate background.

EDUCATION

Nanyang Technological University (NTU), Aug 2025 - 2028

B.Comp (Hons) Computer Engineering, **GPA: 4.4/5**

Ngee Ann Polytechnic, Apr 2019 - May 2022

Diploma in Cybersecurity, **GPA: 3.65/4**

Relevant Coursework: Ethical Hacking, Malware Analysis, Cryptography, Computer Networks, Operating Systems (Windows/Linux), Data Structures & Algorithms, Software Engineering, Machine Learning, AI, Databases, Object-Oriented Programming

TECHNICAL SKILLS

Languages: Python, Bash, SQL, PowerShell, C/C++, Java, JavaScript

Offensive Security Tools: Kali Linux, Metasploit, Burp Suite, Nessus, Nmap, Wireshark

Domains: Penetration Testing, Red Teaming, Vulnerability Assessment, OWASP Top 10, Mobile Security Testing, Security Automation, Threat Modelling, Generative AI, LLMs

Platforms: Linux (Kali, Ubuntu, RHEL), Windows Server, Active Directory, Azure

Documentation: Penetration Test Reports, Vulnerability Findings, Remediation Recommendations

EXPERIENCE

Cybersecurity Intern (Pentesting & AI Security) | PwC, PricewaterhouseCoopers | Jul 2026 – Dec 2026

- Joining the cybersecurity team with a focus on penetration testing and red teaming, AI security, and automation of cybersecurity workflows using AI-native tooling.

Cybersecurity Intern & Penetration Tester | Thinkture | Apr 2021 – Feb 2022

- Built custom Python tooling to automate detection and scanning of all OWASP Top 10 vulnerabilities, embedding continuous security testing into client assessment workflows.
- Conducted ethical penetration tests on Android devices using Metasploit, exploiting remote access attack vectors to identify vulnerabilities and validate remediation.
- Engineered a ransomware proof-of-concept in a controlled lab environment to stress-test client infrastructure and validate defensive countermeasures.
- Conducted network security audits and managed virtualised environments (Windows Server, Kali Linux), administering Active Directory and performing security hardening via Group Policies, Registry edits, and PowerShell scripts.

Firefighting Trainer, Sergeant | Singapore Civil Defence Force | Oct 2022 – Aug 2024

- Awarded the 2024 Good Performance Award for sustained operational excellence.

PROJECTS

MacroPollo | Autonomous AI Agent | Top 8 NTU Fintech Innovators Hackathon 2026 | Python, FastAPI, RAG

- Engineered an autonomous AI research agent on a locally deployed LLM with built-in safeguards against prompt injection and hallucination, hardening the system against adversarial inputs.
- Architected the system with zero external API dependencies and on-premise data storage, enforcing strict data handling controls.

Rail Energy System | SBS Hackathon | 2026 National Winner, 1st Place, SGD 3,000 | Outcompeted 200+ teams

- Proposed a novel energy-harvesting solution that captures airflow generated by moving trains in underground MRT stations, using turbines to convert tunnel wind into usable electrical energy.
- Designed and built a working prototype demonstrating the concept's technical viability.

LEADERSHIP & ACHIEVEMENTS

International CTF Representative | NTU Sentinels | 2025

- Selected to represent NTU at the Vietnam National Cybersecurity Association CTF, applying offensive security techniques including web exploitation, reverse engineering, and binary analysis in competitive conditions against international university teams.

Subcommittee Member | NTU Sentinels Cybersecurity Club | 2025 – Present

- Co-led planning of SentCTF, NTU's flagship cybersecurity competition, coordinating workshops, challenge development and industry partnership outreach.

Chief Group Leader & Student Ambassador | CCDS Orientation, NTU | 2025 – Present

- Commanded a committee of 10 student leaders across large-scale orientation events.

President | Debate Society | Jan 2017 – Mar 2018

- Multiple 'Best Speaker' awards for constructing rigorous, evidence-driven arguments under competitive pressure.