Kwek Ming Hong

+6581233049 | @ me@kwekmh.com | in LinkedIn | GitHub | Blog

EDUCATION

University of Warwick	Coventry, United Kingdom
BSc in Computer Science; ***First Class***	*Oct 2015 – Jun 2018*
Nanyang Polytechnic	Singapore
Diploma in Information Security; ***GPA: 3.98/4***	*Mar 2010 – Apr 2013*

WORK EXPERIENCE

Ensign InfoSecurity	Singapore
DevOps Lead, Consulting	*Feb 2024 – Present*

- Build and lead teams of software engineers, DevOps engineers and data analysts to develop innovative cyber security solutions, including the following key projects: (1) a sensor deployment and analytics platform, and (2) an automated incident response solution.
- Provide technical leadership within and outside the team for key projects in the portfolio.
- Drive the development of DevOps practices and platform engineering within the business unit.
- Develop product roadmaps and execute on them by directing and prioritising engineering efforts.
- Conduct business development and solutions engineering for products and services in the portfolio.

Affinidi	Singapore
Application Security Engineer, Senior	*Jun 2023 – Feb 2024*

- Drove security strategy across all the products and workstreams in the organisation.
- Provided technical leadership and subject matter expertise as a security expert.
- Performed security reviews and assessments of services developed primarily in Node.js with TypeScript.
- Performed design reviews and security reviews of application architectures on Amazon Web Services (AWS).
- Built automated tooling to measure and enhance security testing as part of the CI/CD pipelines in GitLab and GitHub.
- Engaged with senior leadership, engineering teams and product managers to advance product security.
- Served as owner for Cryptography Policy for Information Security Management System (ISMS) to drive governance and compliance in efforts towards ISO/IEC 27001 certification.

Ministry of Defence	Singapore
Consultant, Integrated Solutions	*Dec 2021 – Jun 2023*

- Adopted a start-up mindset as part of an unit incubated to bring certain integrated concepts to life, including by conducting roadshows and product demonstrations to garner stakeholders' interest.
- Developed projects across hardware and software stacks in various languages including Go, Python, C and C++.
- Designed and maintained secure infrastructure, including Virtual Private Networks (VPNs) and web servers, for delivery of services and products.

Centre for Strategic Infocomm Technologies	Singapore
Consultant, Red Team	*Sep 2019 – Nov 2021*

- Conducted red teaming campaigns to audit the security posture of complex enterprise networks.
- Performed software auditing and penetration testing to identify weaknesses in systems.
- Developed tools and software to assist in penetration testing and red teaming operations.
- Worked on automation frameworks and systems to improve work effectiveness.

Centre for Strategic Infocomm Technologies	Singapore
R&D Engineer, Networks and Systems Security	*Jun 2018 – Sep 2019*

- Performed security assessments of Linux-based systems and enterprise appliances.
- Performed vulnerability research and malware analysis on Linux-based systems and enterprise appliances.
- Developed userland and kernel software to support the security of Linux-based systems and enterprise appliances.
- Conducted penetration testing on web applications and complex networks.

CERTIFICATES

Certified Information Systems Security Professional (CISSP)   *Mar 2023*
(ISC)²

Offensive Security Certified Professional (OSCP)   *Aug 2016*
OffSec

Organizational Systems Security Analyst (OSSA)   *Dec 2018*
ThinkSECURE Pte Ltd

SKILLS

Programming: Python, Go, Rust, C, C++, Objective-C, Swift, JavaScript, TypeScript, Ruby, PHP

Cloud: Amazon Web Services (AWS), Microsoft Azure

Systems Administration: Linux, Windows, Active Directory, Microsoft Exchange

Technologies: PostgreSQL, MySQL, Docker, Kubernetes, Ghidra, IDA Pro, WinDbg, GNU Project Debugger (GDB)

Languages: English, Mandarin