Ang Yong Liang

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WORK EXPERIENCE

PayPal, Full-Stack Software Engineer Intern, Global Compliance   **Aug 2023 – Dec 2023**
SpringBoot(Java), React(JavaScript), Typescript,Oracle Database, JUnit, Python, Jupyter Notebook, Cypress, OpenAPI
- Spearheaded creation of front-end (ReactJs, Typescript, Cypress) and back-end (SpringBoot, Java) features for PayPal's KYC Platform, ensuring alignment with regulatory and business requirements
- Collaborated with API team, leveraging OpenAPI, to update and refine platform's existing API specification
- Coordinated with database team to provision new column and backfill for existing database tables, developed and tested SQL scripts for applying, verifying, and rolling back database changes
- Identified and addressed legacy bugs within codebase, leading to reduction in technical debt ratio from 30% to 6%, measured using SonarQube

JPMorgan Chase, Summer Analyst (Software Engineer), Corporate & Investment Banking   **May 2023 – Aug 2023**
SpringBoot(Java), React(JavaScript), Reactive Spring, Oracle Database, Apache Camel, Java Message Service, JUnit
- Pioneered development of (SpringBoot, Java) microservices to generate SWIFT messages, improving sub custodian settlement, trade settlements and corporate action processing
- Collaborated in full SDLC with APAC and EMEA teams, tracked development progress via Jira, and Confluence
- Enhance existing CRM tool by creating new elastic search functionality (ReactJs, Typescript), reducing search time by 80%, from 1000ms to 200ms for searched terms, measured using Postman
- Overhauled backend testing solutions leading to an 79% increase in test traceability and overall software quality

DSO National Laboratories, Software Security Engineer Intern, Cyber Security Lab   **May 2022 – Jul 2022**
Java, C/C++, Microsoft Win32 APIs, Reverse Engineering, Windows Kernel Development, CVE Research
- Conducted code reviews of internal Windows driver source code and API endpoints, utilizing tools such as Ghidra, Ida Pro, and WinDbg
- Constructed C proof-of-concept scripts utilizing Win32 APIs, testing them within controlled sandbox virtual machines to ensure security and stability
- Devised and created a Java program to automate taint analysis, uncovering common vulnerabilities in programs, improving company's penetration testing capabilities

DSO National Laboratories, Software Security Engineer Intern, Cyber Security Lab   **May 2021 – Jul 2021**
Reverse Engineering, C#, Python Programming, C programming, Malware Analysis, Burp Suite Security Testing
- Researched and analyzed Common Vulnerabilities and Exposures (CVEs) related to Microsoft Outlook, performing root cause analysis of vulnerabilities
- Developed Python plugins to enhance enterprise penetration testing tools, including Metasploit & Core Impact
- Analyzed post-exploitation techniques employed by adversaries such as ransomware and crypto mining, gaining insights into emerging threats and vulnerabilities

EDUCATION

National University of Singapore (NUS)   **Aug 2020 – Jul 2024**
- Bachelor of Computing (Honours) in Computer Science   GPA: 4.14/5.0
- Relevant Modules: Cloud Computing, Software Development, Database, Computer Security, Algorithms
- Teaching Assistant: CS2107 Information Security, CS4238 Computer Security Practice (2032/2024 Semester 2)

EXTRACURRICULARS ACTIVITIES

NUS Greyhats, Core member   **Nov 2021 – Present**
- Designed and contributed cyber security challenges for Grey Cat The Flag, and NUS WelcomeCTF 2022 - 2023
- Authored technical writeup on android application reversing, viewed by over 500 students

SKILLS

- **Languages:** Java, Python, JavaScript, C/C++, C#, SQL, Dart, XML, Golang
- **Databases:** PostgreSQL, MongoDB, MySQL, SQLite, Firebase Storage, Redis, Apache Spark, Oracle Database
- **Libraries/Frameworks:** SpringBoot, Node.js, React, AWS, Docker, Kubernetes, Django, Flutter, Hadoop