

Work

- Aug'2024 – **Research Assistant**, *National University of Singapore*
Present
 - Conducted research on fuzzing and automated software testing under Professor Abhik Roychoudhury.
 - Contributed to projects aimed at improving bug detection, fuzzing efficiency, and automated software repair techniques.
- Jan'2024 – **Teaching Assistant**, *National University of Singapore*
Present
 - Served as a teaching assistant for CS2107 (Introduction to Information Security).
 - Assisted with exam sessions and grading assignments.
- July'2021 – **Product Security Engineer**, *Red Queen Dynamics*, Washington, D.C.
Aug'2023
 - Worked as a full-stack developer to develop a security training product from scratch (using Django/PostgreSQL) and created a CI/CD pipeline for automated deployments.
 - Managed DevOps for the team, creating and managing cloud infrastructure (AWS) to support internal applications.
 - Performed ad-hoc penetration tests for various clients.
- Aug'2020 – **Bug Bounty Hunter**, *HackerOne/BugCrowd/Intigriti*, Remote
Aug'2023
 - Listed on the Hall of Fame for companies like Google, GitHub, PayPal, US DoD, DELL, and Atlassian.
 - Performed static and dynamic code analysis on Android and web applications.
- Aug'2019 – **Developer**, *Vulnhub/TryHackMe*, Remote
Mar'2020
 - Developed Capture The Flag (CTF) challenges for TryHackme.com focused on web vulnerabilities like XXE, XSS, and JWT.
 - Created vulnerable machines for VulnHub.com with custom applications in Python and Bash.

Open Source Internships

- May – Aug 2023 **Student Developer**, *Google Summer of Code - The HoneyNet Project*
 - Enhanced a high-interaction honeypot (Snare/Tanner) with improved speed, persistent storage, and API functionality.
- May – Aug 2018 **Student Developer**, *Google Summer of Code - XBMC Foundation*
 - Developed a Python tool for static code analysis of Kodi addons.

Projects

- 2021 – 2022 **Slicer**, Python
Developed a tool designed to automate the bug-hunting process for Android applications (APKs). This tool effectively identifies potential vulnerabilities in various components, including activities, receivers, and services.
- 2017 – 2018 **Liffy**, Python
Created a tool to automate the discovery and exploitation of Local File Inclusion (LFI) attacks, which can be utilized to obtain a reverse shell.

Education

- 2023 – 2024 **Masters of Computing**, *Infocomm security*, National University of Singapore
- 2017 – 2021 **B.Tech**, *Computer Engineering*, Inderprastha Engineering College

Certifications

- 2021 **OSCP**, Offensive Security Certified Professional