

Bailin Li

☎ 98636166 | ✉ bailinx@hotmail.com | 🏠 www.rootkiddie.com | 📺 rootkie | 🌐 li-bailin

Education

NUS(National University of Singapore)

B.S. IN COMPUTER SCIENCE

Singapore

Aug. 2020 - May. 2024 (Expected)

Technical Skills

Cybersecurity Reverse Engineering, Binary Exploitation, Penetration Testing, Web hacking

Toolbox Ida, GDB, x64dbg, AFL, Qiling, Burpsuite, Postman

Programming C / C++, x86 Assembly, Node.js, Python, JAVA, Haskell

Back-end Express, Django, Flask, REST API

Front-end Hugo, Redux, React

Work Experience

Alphalab Capital

SOFTWARE ENGINEER INTERNSHIP

Singapore

May. 2022 - Aug 2022

STAR Labs

TOOLS DEVELOPER INTERNSHIP

Singapore

Nov. 2021 - Dec. 2021

- Worked on refactoring and profiled of a custom taint analysis tool written in angr

STAR Labs

N-DAY VULNERABILITY RESEARCHER INTERNSHIP

Singapore

Mar. 2020 - Jun. 2020

- Disassembled and analyzed network / IOT device firmware.
- Discovered and reported 3 vulnerabilities in Singtel Mesh Nodes, assigned CVE-2020-15357, CVE-2020-25545 and CVE-2020-25546.
- Reverse engineered and exploited VirtualBox display driver emulator.
- Used Qiling framework and AFL for emulated closed source binary fuzzing.

Extracurricular Activity

CTFs with (T0X1C V4P0R & StrangleHold & NUSGreyHats)

MEMBER

Singapore

2014 - Present

- Participated on several hacking competition, 60+ CTFs with T0X1C V4P0R from 2017 to 2019 and won a number of awards.

Hwa Chong Infocomm and Robotics Society

PRESIDENT

Singapore

2016 - 2017

- Developed and led the cybersecurity wing to win multiple national CTFs.
- Led a team of developers to create applications to support school events.

Projects

CTF Reverse Engineering Challenges

CHALLENGE AUTHOR

- Needle in a Greystack - TISC 2021
- RE Challenges - Grey Cat The Flag 2022

Librephotos

OSS-CONTRIBUTOR

- Librephoto is a self-hosted open source photo management service with 3.3k stars on Github
- Implemented new features to the Django backend and React.js Redux frontend to create better user experience
- Identified and fixed several bugs in the backend

toy-vm

CREATOR

- Toy-vm is a byte-code interpreter with custom ISA, CPU and memory emulation written in C
- It is designed as a foundation for VM based reverse engineering challenges.

Honors & Awards

NATIONAL COMPETITIONS

2020	1st runner up , STACK the Flags - Capture The Flag	Singapore
2020	personal 7th , The InfoSecurity Challenge (TISC)	Singapore
2020	1st Runner up , Brainhack - Capture The Flag	Singapore
2019	1st Runner up , Brainhack - Capture The Flag	Singapore
2017	Champion , Cross CTF	Singapore
2017	Champion , Cyber Defenders Discovery Camp - Capture The Flag	Singapore
2016	Champion , Cyber Defenders Discovery Camp - Capture The Flag	Singapore