

# Bailin Li

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## Education

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### NUS(National University of Singapore)

B.S. IN COMPUTER SCIENCE

Singapore

Aug. 2020 - May. 2024 (Expected)

## Work Experience

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### Quantedge Capital

SOFTWARE ENGINEER INTERNSHIP

Singapore

May. 2023 - Aug. 2023

- Design, prototype and develop big data pipelines using Apache Spark and Delta Lake
- Improves local development process by streamlining local kubernetes and aws s3 setup
- Developed devops tools for integrating with databricks and achieved 0 cost local testing and 0 touch deployment through github actions and Terraform

### National Univeristy Of Singapore

TEACHING ASSISTANT - CS2100

Singapore

Aug. 2022 - Nov. 2022

- Taught assembly, circuit design and cpu architecture during lab sessions

### Alphalab Capital

SOFTWARE ENGINEER INTERNSHIP

Singapore

May. 2022 - Aug. 2022

- Fixed and resolved bugs in legacy python monolithic codebase while migrating legacy components to modern design
- Added arbitrage finding and trading capabilities by building trading infrastructure on ETH blockchain
- Improved trading account management by developing fullstack web tool for internal usage

### 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

- 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.

## Projects

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### Oat Compiler

DEVELOPER | OCAML

- Compiles a teaching language OAT with polymorphic type checking, compiler optimisation using dataflow analysis and register allocation

### Static Program Analyzer

PROJECT LEADER | C++

- Led a team of 6 new C++ programmers for a software engineering project
- Designed and built a static program analyzer with a query interface from ground up

## Honors & Awards

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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