

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE | Aug 2018 - May 2022

Bachelor of Computing in Computer Science and Bachelor of Science in Applied Mathematics.

WORK EXPERIENCE

JUMP TRADING | CORE DEV (C++)

Software Engineering Intern | May 2022 - July 2022

- Incoming Summer 2022 intern in the Core Development (C++) team in Jump Trading.

SQUAREPOINT CAPITAL | ORDER GATEWAY

Software Engineering Intern | Jan 2022 - May 2022

- Detected anomalies on the Order Gateway by post-processing FIX messages to calculate the gateway's latency in real-time.
- Design and develop a resource efficient service that continuously tracks the gateway resource usage.
- Tech Stack: C++ • Python • Elastic Search • FIX

GOOGLE | GOOGLE PAY CLIENT INFRA

Software Engineering Intern | May 2021 - Aug 2021

- Decreased the time taken to detect accessibility issues by **95%** an automated crawler that detects accessibility issues.
- Led project from end to end by designing the architecture, implementing code, and developing processes for other teams to incorporate the tool into their workflow.
- Tech Stack: Flutter • Bazel • Java

NINJA VAN

Software Engineering Intern | Dec 2020 - May 2021

- Oversaw the design and implementation of a search service that aggregates data from different multiple micro-services.
- Accomplished scalability by leveraging the asynchronous event-based system.
- Tech Stack: Play Framework • MySQL • Kafka • Protocol Buffer

XFERS

Software Engineering Intern | May 2019 - Nov 2019

- Led the creation of an API documentation generator that decreases client integration time by **50%**.
- Initiated and led the implementation of customized error codes that reduce the time taken to identify bugs by **80%**.
- Tech Stack: Ruby on Rails • React • Open API Specification

PROJECTS

BITCOIN | [GITHUB.COM/BITCOIN/BITCOIN](https://github.com/bitcoin/bitcoin)

- Improved user experience of -getinfo CLI command; revamped the return format to include colours and progress bar. PRs: [#21832](#) [#22547](#) [#22959](#)
- Detected and resolved bugs in the code base. PRs: [#24371](#) [#21718](#)
- Executed quality assurance testing and code review on various other contributors' pull requests.
- Tech Stack: c++

STATIC ANALYZER IN C++17

- Developed a highly performant static analyzer for the SIMPLE programming language in C++ 17.
- Implemented a recursive descent parser to construct an abstract syntax tree.
- Achieved low latency by implementing a custom memory arena allocator.
- Leveraged on templates to achieve compile time polymorphism and smart pointers for easy memory management.

C++ STRING

- Implemented std::string with short string and copy on write optimisation.
- Achieved 2x speedup over LLVM's implementation when copying long strings.
- You can view the project [here](#)

TECHNICAL SKILLS

- **Languages:** C++ • Java • Python • Dart • Ruby • Javascript • Bash
- **Technologies:** Bazel • Flutter • Elastic Search • Kafka • Ruby on Rails • React • Docker • pytest • MySQL/PostgreSQL • Git