



## EXPERIENCE

Feb 2020 – Now  
fulltime

### Senior Software Engineer

### Open Government Products

I mainly work on FormSG, an official Singapore Government's form builder application. I was also part of the team tasked to work on Singapore's COVID-19 response.

- Epic lead for a frontend framework migration from AngularJS to React for FormSG.
- Epic lead for an API migration, which includes renaming, simplifying, and refactoring endpoints to a more RESTful and meaningful state.
- Spearheaded the creation of an internal design system, released as an npm package with close collaboration with the designers to achieve visual continuity and consistency across OGP products (eventually).
- Promoted the use of Storybook and Chromatic as a visual regression testing and usage-guidelines tool to other software engineers.
- Built the entire clinician-facing frontend application for Singapore's COVID-19 Appointment System to allow clinic staff to manage appointments and patients coming in for their vaccinations.
- Wrote lambda pipelines to automate parts of patient and case management relating to Singapore's COVID-19 Endemic response.

Node.js / React.js / TypeScript / JavaScript / Design Systems

May – Aug 2019  
internship

### Software Engineer Intern, Google Pay

### Google Singapore

Completed and had full ownership of a new feature in the (then) Android application, including but not limited to high level architecture, design decisions, implementation, and testing.

Java / Android

May – Aug 2018  
internship

### Frontend Software Engineer Intern

### INTELLEX

Implement features and components related to the design overhaul of the main enterprise React app. In addition, I also refactored many tightly coupled components into pure functional components, resulting in improved readability and testability.

JavaScript / React

## EDUCATION

2016 – 2019

### B.Comp (Hons) in Computer Science

### National University of Singapore

CAP: 4.45/5.00, Honours (Distinction)

## SIDE PROJECTS

2020

### Reify

🍏 iOS Appstore      🌀 karrui/goals-flutter

A goal tracking app built with Flutter for users to track their goals. Reify is an app that allows you to create virtual goals you can contribute to whenever you catch yourself having extra money. Built to explore a new programming language, and to try out designing a "native" app all by myself.

Flutter / Dart / Firebase

2018

### CAP Calculator

🔗 cap.karrui.dev      🌀 karrui/cap-calculator

A TypeScript React application for NUS undergraduates to calculate their current CAP (Cumulative Average Point), helping them to visualize what grades are needed to hit their goal, or what their current grade is.

TypeScript / React / Firebase / Netlify

2018

### Static Program Analyser For SIMPLELang

📄 Code privatised (due to school policy) but available on request

A C++11 desktop static program analyser application. Worked extensively on the tokenizer and the parser for parsing the given input source code. Made sure code followed design principles such as Open-Closed Principle. Wrote unit, integration and system tests using equivalence partitioning.

C++11