# **Khairul Iman**

Software Engineer based in Singapore, with 2 years of experience developing fullstack systems in JavaScript, Python & C++ with a focus area in making blazingly fast websites.

**EXPERIENCE** 

**Ruckus Wireless, CommScope Solutions**, Singapore - *Software Engineer* July 2022 - Present (Full-time)

- Created core UI components & pages for web network analytics & management dashboard, *Ruckus ONE*. Optimised ECharts & React to render complex time series charts with 100,000+ data points in under 10 seconds.
- Authored highly customised interactive behaviour using React Hooks surpassing Antd.js component limitations for Ruckus ONE.
- Developed containerised scripts in Docker for new services and expanded existing microservices architecture using Bash, Kubernetes & Helm.

**National University of Singapore,** Singapore — *Lab Teaching Assistant* Jan 2022 - Apr 2022 (Part-time), Aug 2020 - Dec 2020 (Part-time)

 Mentored 2 different batches of 60+ undergraduate students to design and assemble a maze clearing robot running RTOSv2 & C++ embedded programming on the ARM-M0+ microcontroller for CG2271: Real-Time Operating Systems.

**Sellgo,** Silicon Valley — *Fullstack Engineering Intern (NUS NOC Program)*Jan 2021 - Dec 2021 (Full-time - Remote), Jan 2022 - Feb 2022 (Part-time - Remote)

- Built web scrapers in Scrapy & Python, along with administering 3 instances of sharded MongoDB replicas, scraping over 2 million pages a day.
- Led the implementation of keywords database features, from designing ETL data pipelines, storage architecture & extended existing Django-backend services to consume and present 100GB+ of analytics data to end users.

**NUS Information Technology,** Singapore — *Project Intern* Dec 2019 - Dec 2020 (Combination of Full-time & Part-time)

- Prototyped a low-cost network health sensor with Raspberry Pis, which is able to detect fluctuations in Wi-Fi strength from 5-10 metres.
- Designed a self-help web portal for university researchers to provision internet access to IoT devices with Flask, MySQL, Ansible and Cisco ISE REST APIs.

## **EDUCATION**

**National University of Singapore,** Singapore — *Computer Engineering* 

Aug 2018 - May 2022, CGPA: 3.91 / 5.0

Bachelor of Engineering (Honours) with second Major in Innovation & Design and entrepreneurial exposure gained from the Overseas College Program (Silicon Valley).

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## **SKILLS**

TypeScript, JavaScript, Python, Git, Docker, Kubernates, HTML, CSS, C++, C, Bash, English, Malay, Bahasa Indonesia (Basic)

## **AWARDS & ACCOLADES**

## ComfortDelgro Hackathon 2019

Led a 5 man team to win first place for pitching improvements to Singapore buses for better crowd management.

## **Philip Yeo Grant**

Awarded a \$5K SGD grant for exploring startup ideas & living expenses.

# <u>Innovation & Enterprise</u> <u>Practicum</u>

Awarded a \$10K SGD grant for pitching a household waste tracking app to NUS School of Computing.

## **PROJECTS**

## khairuliman.com

Personal site built with **Gatsby.js** & **TypeScript**, converting **Markdown** files to blogging articles.

## <u>TinyCompiler in Rust</u>

Building a small C-subset compiler in Rust & explorations with C, C++ & OpenGL to learn computer graphics.

## PropertyGuru Scraper

Adapted **Python** PropertyGuru **web scraper** for Singapore, complete with **WhatsApp Automation**.

## ideate2020

**Spearheaded** the Innovation and Design Student's Club **first ever virtual design hackathon**.