

# BRENDAN CHEONG ERN JIE

## Software Engineer

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📍 Singapore

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🔗 [BrendanCheong](#)

## WORK EXPERIENCE

### Software Engineering Intern

#### Solar AI Technologies

📅 May 2022 – Aug 2022

- Built and launched a new customer portal using **React.js**, **Typescript**, and **NextJS** which allows over 100 customers to **manage their solar installation and liaise with solar panel installers**.
- Upgraded critical GraphQL APIs and optimized the database schema to be at **least 2x more performant**.
- Architected **fully automated UI and backend tests** to achieve 100% code coverage (Jest, React Testing Library).
- Utilized AWS services such as **DynamoDB**, **S3**, **Elasticsearch**, **Cognito**, and **EventBridge** to build the business backend using the serverless architecture.

### Robotic Process Automation Intern

#### Ministry of Communications and Information

📅 December 2021 – April 2022

- Developed an **automated bot using Python** to register over 500 staff members for Zoom meetings and email staff on their Zoom meeting timings.
- Created automated email workflows using Python to remind staff members of meetings, **reducing the time taken to send emails manually by 50%**.

## PROJECTS

### Build.me (Online Product Aggregator)

#### React.js, Node.js, Express.js, MongoDB, TailwindCSS

🔗 <https://github.com/BrendanCheong/Build.me>

- Developed a **web application** that helps users **find the best computer parts** from e-commerce websites and allow users to compare **the performance of different computer builds**.
- Aggregated **over 500 products with price points** for easy price comparisons and reduced search time for finding computer parts **by 30 minutes**.
- Developed **interactive graphs and charts** to display price information about the computer build in React.
- Implemented an **authentication email service** by integrating the SendGrid email API with JSON Web Tokens.

### Lights & Locks (Smart Home Ecommerce System)

#### Python, MySQL, Flask, MongoDB

🔗 <https://github.com/BrendanCheong/Online-Smart-Home-Ecommerce-System>

- Led a team of 5 to develop a **full-stack desktop application** that allows users to purchase, search and send smart lights & locks for servicing together with an **admin management system**.
- **Spearheaded the user interface design** and collaborated with 3 others to program the graphic user interface.
- Created backend REST API server with **Python Flask framework** and designed database schema together with **SQL and MongoDB queries** for the backend server.

## SUMMARY

Senior year Economics and Business Analytics undergraduate at the National University of Singapore who is passionate about full stack development with substantial hands-on experience in Javascript and React.

## EDUCATION

### B.Soc.Sci in Economics, Double Major in Business Analytics and Economics

#### National University of Singapore

📅 Aug 2020 – May 2024

## PROGRAMMING LANGUAGES

### Experienced

Typescript

JavaScript

Python

HTML

CSS

### Familiar

C++

Java

SQL

## FRAMEWORKS

React

AWS

Node.js

ElasticSearch

Flask

Git

Express.js

MySQL

MongoDB

## PARTICIPATION

- |  |      |
|--|------|
| • Hack and Roll - NUS                              | 2022 |
| • BrainHack: CodeExp - DSTA                        | 2022 |
| • BrainHack: Cyber Defenders Discovery Camp - DSTA | 2021 |

## COURSEWORK

- Database Management and Systems
- Data Structures and Algorithms
- Object Oriented Programming Principles
- Web Development
- Interaction Design