# **BRYAN MATTHEW RUSTARDY**

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### **EDUCATION**

# Nanyang Technological University

Singapore

Bachelor of Information Engineering & Media (CGPA 4.71 / 5.00)

Awards: Dean's List AY 2022 - 2023 (top 5% CGPA)

2022 - 2026

Relevant Courseworks: (1) Databases, (2) Object Oriented Programming, (3) Data Structures and Algorithm, (4) Intro to Data Science and Artificial Intelligence

### **WORK EXPERIENCES**

# Software Engineering Intern, Astra Financial Indonesia

Dec 2023 - Present

- Developed REST API endpoints with **Spring Boot** and formulated unit tests using **JUnit**.
- Currently developing and migrating the Astra Financial career website's frontend from JQuery to **Next JS** and utilizing **Redux Toolkit** as the global state management system.

#### **PROJECTS**

# ShareMySight

- Created an inclusive web app aiding visually impaired individuals through AI and live communication.
- Employing Next.js, TypeScript, and Tailwind CSS for the frontend, Spring Boot for the RESTful backend, and JUnit for unit testing.
- Integrated **Open AI Vision API** to translate image to descriptive text and connects visually impaired individuals with volunteers through voice/video call using **webRTC** and **websocket** for further assistance.
- Implemented containerization with **Docker** and deployed the backend on **AWS EC2**.

### Shoppable

- Designed a dynamic e-commerce platform using **Vue JS** framework for the frontend and implemented a **RESTful API** service using **Express JS**, and storing data in **PostgreSQL**.
- Facilitate user authentication via JSON Web Token (JWT) and Google **OAuth** service.
- Integrated application with various third-party APIs: the Midtrans payment gateway API for secure credit card payments and Google Maps geolocation and place API for address tracking.

### **Online Food Delivery Time Prediction**

- Led a team of 5 to create predictive models to help food delivery businesses in predicting time taken for food to arrive at customer's destination given attributes such as distance, road network, city terrain, etc.
- Preprocessed and cleaned extensive data using **Python** and **Pandas**. Trained ML models, including lasso, random-forest regressor, and XGBoost with **Sci-Kit Learn**. Attained peak accuracy of 83% with XGBoost.

#### SortViz

- Developed an interactive sorting visualizer application using **React JS** and **Tailwind CSS**.
- Incorporated four sorting algorithms: Bubble Sort, Quick Sort, Heap Sort, and Merge Sort, providing users with the ability to compare the efficiency and performance of each algorithm.

## **CO-CURRICULAR ACTIVITIES**

# NTU Students' Union IT Committee [Backend Engineer]

Sept 2023 - Present

- Collaborated with 3 other backend developer members to develop and maintain the backend service of the NTUSU app to cater students' needs using Django.
- Create **RESTful API** endpoints, storing files in **AWS S3** and write **unit tests** for the given endpoints.

#### **SKILLS**

**Programming Languages:** Javascript, Typescript, Java, Python **Frontend:** Next JS, React JS, Vue JS, Redux, HTML & CSS **Backend:** Node JS, Express JS, ORM, SQL, Spring Boot, JUnit