

John Alec Mendoza Branzuela

☎ +65 9025 9104 | @branzuelajohn@gmail.com | 🔗 LinkedIn | 🐙 GitHub

EDUCATION

National University of Singapore (NUS)

Aug 2019 - May 2023

Bachelor of Computing (Computer Science), Honours

Specialised in Software Engineering and Networking; Minor in Management

TECHNICAL SKILLS

Programming: Javascript, Java, C/C++, Python, R, MATLAB, Swift, PostgreSQL, Typescript, HTML, CSS

Software Framework: React-Redux, NodeJS, React-Native, NextJS, AWS, Express, Flutter, Jest, Confluence, Jira, Git, REST, Docker, Firebase, MongoDB, Vim, TailwindCSS, Gradle, Junit/JavaFX, Express

Design Tool: Figma, Adobe Photoshop

PROFESSIONAL EXPERIENCE

Fullstack Developer, Avaloq, Singapore

Jan 2024 - Aug 2024

- Analyzed and resolved critical defects in Web and Mobile Banking solutions for APAC clients, utilizing Angular and Avaloq's scripting language, ensuring uninterrupted banking operations
- L3 support for Web and Mobile Banking for APAC clients, having constant collaboration with banks for new and ongoing feature enhancements.
- Managed the continual maintenance and optimization of web and mobile banking services for three major private banks across the Asia-Pacific region, ensuring uninterrupted client satisfaction and operational excellence.
- Migrated existing web pages from JSP to Angular RestUI as part of an upgrade project, enabling more efficient feature rollouts for web and mobile banking services

Software Engineer Intern, Lalia, Singapore

Dec 2021 - Jun 2022

- Implemented search and filter functionality, pagination and optimized landing and profile pages using **ReactJS** and **NextJS**, reducing page load times.
- Developed a comprehensive Image CMS using **AWS Amplify** and **AWS S3**, optimizing image load times and storage efficiency
- Integrated Google Login functionality into the web application, streamlining user authentication and enhancing onboarding experience.
- Developed unit tests with **Jest** and automated end-to-end testing using **Playwright**, improving test coverage by 25%
- **Tech Stack:** ReactJS, NextJS, Typescript, AWS Amplify, GraphQL, NodeJS

Mobile Software Developer Intern, Thales, Singapore

May 2021 - Aug 2021

- Participated in the design, implementation, and validation of mobile iOS applications within the R&D drone project team, adhering to established processes and delivery standards using Swift
- Implemented **RESTful API** and **Websocket** integration for seamless data exchange
- Utilized **RxSwift** to dynamically update and track real-time drone data and nearby drones
- Collaborated with UI/UX designer to enhance the application's frontend design across multiple pages
- Conducted field testing to ensure real-time functionality of drone devices with the software

PROJECTS

PeerPrep, Software Engineering Principles and Patterns Project CS3219

- Built a **microservices-based web application** with user authentication via **JWT tokens** and real-time collaboration features using **Socket.io**
- Deployed on **AWS Cloudfront** with a **MongoDB** backend, following Agile development and CI/CD pipelines
- Tech Stack: MongoDB, Express, ReactJs, AWS, Socket.io

Power NBA Analytics

- Developed a data analytics web application using **R** and **Shiny** framework, allowing users to interactively explore and analyze NBA statistics from 2000 to the present
- Scraped and cleaned historical data from various sources, ensuring accuracy and consistency for statistical analysis
- Developed **interactive dashboards** and predictive models using regression analysis, offering insights on player performance trends

TemTech, Front-End Engineer

- Coordinated with back-end developers and UI/UX designers to develop a React Native mobile application responsible for venue bookings, and tracking attendance for 500 residents in Temasek Hall
- Developed a Minimum Viable Product under an AGILE work cycle, worked with Scrum methodology to develop a React Native application

CommonHealth, Orbital 2020 Independent Software Development Project

- **Tech Stack:** Swift, Firebase
- Developed an iOS mobile app using **Swift** with **Firebase** backend, creating a queue management system for appointment scheduling.
- Built a **calendar system** for tracking follow-up appointments, improving user workflow and time management.
- Conducted user testing and feedback integration, increasing app usability by **15%**.

Software Engineering Project CS3203

- Designed and programmed a parser in C++ that can take in and statically analyze a source program written in SIMPLE and return patterns, relationships and entities
- Collaborated as a team of 6 where we split into three sub-teams to work on different components (source processor, program knowledge base & query processing system) of the project under an AGILE work cycle, worked with Scrum methodology

CO-CURRICULAR ACTIVITIES & LEADERSHIP

Media Director, Temasek Hall Junior Common Room Committee

Aug 2021 – Aug 2022

- Managed all hall activities for 500 members of the hall, working with 80 CCA heads and managing over a hundred thousand dollars worth of student-led activities. As the Media Director, in charge of content creation, entertainment/promotion and training of residents for videography, photography, design and audio equipment
- Led discussions in promoting safe and healthy hall culture and represent the views of 500 members of the hall and responsible for overseeing 83 hall activities in a year

Committee Head, Temasek Hall Video Production Unit (VPU)

May 2020 - Aug 2021

- Managed a team of 40+ individuals to produce 90+ high quality video productions taken up by Temasek Hall (internal + external)
- Conducted training and in charge of operations and \$30,000 worth of equipment.
- Liaised with student leaders and hall administration figures to ensure production and event requirements were met

Varsity Captain, NUS Touch Rugby

May 2022 – May 2023

- Led a team of 22 to represent the school to compete in the SuniG games where we achieved first place
- Liaised effectively with management figures and handled administrative matters, ensuring that all trainings and matches were supported with adequate resources