## RODO **NGUYEN**

#### **SUMMARY**

Software Engineer with 1+ years of experience in developing commercial applications. Proven expertise in debugging, coding, and testing complicated software. Super familiar with Agile Methodology and Software Development Life Cycle. A fast and driven learner.

#### **SKILLS**

Languages: JavaScript/TypeScript, Python, SQL, C#, HTML/CSS.

Technologies: React, Vue, Express.js, PostgresSQL, AWS (DynamoDB, S3, EC2, Lambda, Load Balancer, etc.), Tailwind, Jest, Chai.

Others: Linux/Ubuntu, Git/GitHub, Docker, Data Structures and Algorithms, Test-driven development, Agile.

#### **EXPERIENCE**

### **Junior Software Engineer**

April 2023 - December 2023

## **AerVision Technologies**

- In charge of maintaining and expanding both the system's React front-end and Express.js API capability while following OpenAPI specifications to facilitate third-party integration.
- Carried out multiple AWS deployments for the production API.
- Worked together with Senior Engineers to architect the flow of information between the Express API and React client and to implement new features.
- Headed up TypeScript and React best practice documentation to increase collaboration and maintainability in the codebases.
- Ensured outcomes are at the highest quality, including collaborating with Quality Assurance analysts to fix bugs and implement security patches
- Integrated Jest and Mocha testing suites for the API to prevent new changes breaking old features, and unit tested important functions and processes of the application, with a coverage goal of >90%.

## **Vacation Researcher**

November 2022 - February 2023

## CSIRO-Data61

- Spearheaded independent research, evaluating and selecting optimal C++ ML libraries for an EdgeAl project.
- Achieved an 8x reduction in memory consumption of the ML model by applying a novel training strategy that utilizes smaller loads of training datasets, significantly improving resource efficiency without compromising accuracy.
- Conducted a series of exhaustive tests on both Ubuntu and Raspberry Pi to ensure robust inter-device functionalities.

### **Software Engineer**

February 2022 - November 2022

#### **S23M**

- In this Work-Integrated-Learning job, I efficiently developed the Front-End with modern look for executing CRUD operations to a health database using **React and MaterialUI**, resulting in a 6-sprint being delivered in 4 sprints.
- Implemented many core features which handle complicated queried data (following FHIR standard) and display results clearly in the Front-End, further enhancing the User Experience.
- Developed a highly-intuitive custom feature for video management software, resulting in significantly shorter reaction time for Emergency Events for a public transport client.

# PROJECTS CoolerSurvey

- **Customisable Survey App** | https://github.com/rodonguyen/CoolerSurvey
  - A full-stack app built for creating survey forms and allows **custom** survey content according to pre-defined access codes.
  - Implemented **MERN** architecture, devised suitable database schemas, created multi-step forms, and developed various API endpoints, broadening my expertise in Full-stack development, System Design, and Database Modelling.
  - Automated API testing with the Chai.

## **Twitter E-nalyst**

## Sentiment Analysis for Tweet Keywords

| https://github.com/rodonguyen/Twitter-E-nalyst

- Developed a **React** web application with a modern UI to perform keyword sentiment analysis on Twitter data (from Twitter API).
- Implemented a **serverless** architecture using AWS services such as EC2, Load Balancer, and Auto Scaling to efficiently scale with variable usage and optimise cost.
- Significantly improved response time by integrating in-memory caching services such as Redis, alongside persistence technologies like S3 and DynamoDB.

#### **EDUCATION**

## Bachelor of Information Technology

Minor in Intelligent Systems

## Queensland University of Technology

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