### KASUN THENNAKOON

Toronto, ON |+16474661920 | tmkasun@gmail.com LinkedIn://tmkasun | GitHub://tmkasun | Twitter://@tmkasun | Facebook://tmkasun

### **SOFTWARE ENGINEER**

An experienced Software Engineer with a strong background in web technologies, combined with in-depth knowledge of API management. Coming from a culture of open-source development, I bring a collaborative and innovative approach to software engineering. Collaborates effectively with others to improve business outcomes. Key skills include:

Programming | Software Development | Implementation | Testing Leadership | Quality Assurance

#### **TECHNICAL SKILLS**

### **Programming Languages**

JavaScript | Typescript | Python | HTML5 | CSS | Java | C++ | Ruby

#### Front-end

ReactJS | NextJS | JSS | Styled | Components | Storybook | Webpack | HTTP/2 | Progressive Web Apps

### Back-end

ExpressJS | NestJS | Python Flask | Python Django | Firebase | AWS EC2

### **API Management**

RESTful APIs | GraphQL | OpenAPI / Swagger | Async API | WSO2 API Manager (Core developer)

### **Testing & Code Quality**

Jest | Cypress | React Testing Library | Enzyme | Playwright | ESLint | Prettier

### **Application Security**

OpenID Connect | JWT | CORS | OAuth2 | OWASP | CSP

#### **CAREER EXPERIENCE**

# Amazon Web Services, Toronto, Canada

# **Front-end Engineer**

- Worked as a front-end engineer of the SNS (Simple Notification Service) team.
- Added a set of integration tests using CloudWatch Synthetics.
- Fixed bugs in the SNS console's web application.

## WSO2, Colombo, Sri Lanka

November 2021-March 2023

March 2023-April 2023

## **Technical Lead**

- Led the architecture and development of the Choreo SPA portal.
- Researched and developed an OpenAPI-based auto mocking service for front-end test automation.
- Revamped the SPA authentication architecture by implementing the OAuth PKCE extension flow, resulting in significantly enhanced security and a remarkable performance boost of over 50%.
- Designed and developed a simple state management mechanism for Choreo SPA application using context and reducer hooks.

### **Associate Technical Lead**

- Improved SPA performance by incorporating various optimization techniques such as lazy loading, strong compression, memorization.
- Implemented an end-to-end (E2E) testing strategy using Cypress.
- Implemented a message-passing mechanism using RxJS.
- Developed a React (Typescript) SDK to communicate with product REST APIs, enabling efficient data retrieval and manipulation.

### WSO2, Colombo, Sri Lanka

February 2018-June 2019

### **Senior Software Engineer**

- Designed and developed an Authentication and Authorization framework for ReactJS web portals based on OAuth 2.0 Authorization code grant flow.
- Authored developer-level product documentation and integrated Algolia search plugin and Google Analytics into the documentation portal, improving site reach and enhancing document search user experience.
- Provided on-site consultation for the deployment, configuration, and customization of the API Manager product, addressing the customer's API Management and Identity and Access Management requirements.
- Developed an Apache JAX-RS interceptor to provide authentication functionality for REST APIs.

## WSO2, Colombo, Sri Lanka

January 2016-January 2018

### **Software Engineer**

- Designed and developed workflow support for Enterprise Store in WSO2 Governance Registry.
- Designed and developed a new Single Page Web Application for the API Manager 3.0 product using the ReactJS library ecosystem.
- Collect and document the system requirements for WSO2 API Manager 3.0 product.
- Implemented configuration and setup of a ReactJS-based Single Page Application (SPA) from scratch, utilizing essential tools such as Webpack, Babel, and ESLint.

### **OPEN-SOURCE CONTRIBUTIONS**

# Google Summer of Code, Remote

### Intern

Designed and implemented the Disk Wizard feature for the Amahi Home Server by utilizing Linux system commands through Ruby on Rails, providing users with an intuitive and efficient solution for managing their disk storage.

### **EDUCATION**

**BSc (Honors) in Information Technology** University of Moratuwa, Sri Lanka

**Physical Science, Mathematics** Royal College, Colombo, Sri Lanka