# **CESAR VALENCIA**

# Senior Software Engineer | Al-Powered App Development | Cross-Platform App Development | Startup Veteran

# **TECHNICAL SUMMARY**

- Diverse industry experience across AI, E-commerce, Healthcare, Real Estate, FinTech, Retail, and Social.
- Built Front-end applications for different platforms using React, Next.js, Vue for Web, React Native, Expo for Mobile, and Electron for Desktop applications.
- Implemented highly-organized state management with Redux, MobX, Zustand, and Recoil.
- Engineered data visualization solutions for the dashboard using <u>Chart.js</u>, <u>ReChart</u>, and <u>D3.js</u>, enhancing the data insights through the improved UI/UX with *localization* and web accessibility principles.
- Back-end development with <u>Node.js</u>, <u>Express.js</u>, <u>Nest.js</u>, <u>FastAPI</u>, <u>Django</u>, and <u>Go</u>, utilizing *monoliths* and *microservices* architecture.
- Proficient in designing and optimizing the database schemas (MySQL, PostgreSQL, MongoDB, Dynamo, FireStore) and integrating them with ORMs (Prisma, SQLAlchemy)
- Implemented API layers with <u>RESTful APIs</u> and <u>GraphQL</u>, and configured secure authentication using services like <u>Okta</u>, <u>AWS Cognito</u>, <u>SuperToken</u>, and <u>Zitadel</u>; managed *cloud infrastructure* (<u>AWS</u>, <u>GCP</u>) with *IaC tools* (Terraform, AWS-CDK).
- Integrated 3rd-party services (Stripe, Hubspot, Shopify, etc.) into the application to enhance the functionality.
- Committed to <u>Test-Driven Development (TDD)</u> using <u>Jest</u>, <u>Cypress</u>, <u>Pytest</u>, and <u>Playwright</u>, delivering high-quality code quickly while adapting to new technologies.
- Integrated GenAl models (OpenAl, Anthropic, Gemini, etc) for implementing Al-related functionalities.
- Quick to deliver high-quality code and adapt to new technologies.

#### **KEY SKILLS**

Typescript, React, Next.js, React Native, Electron, Express, Nest, Python, FastAPI

# PROFESSIONAL EXPERIENCE

# Senior Software Engineer (Lead)

#### **Trustech**

Led end-to-end development and successful delivery of large-scale, mission-critical projects for industry leaders in AI, ECommerce, Blockchain, Real Estate, Media, Retail, Finance and other sectors.

- Developed high-performing cross-platform frontend application using HTML/CSS, React, React Native, Electron, Next.js, Typescript, Tailwind CSS, Radix UI, and ShadCN.
- Brought out a data-visualization solution by utilizing D3.js, Chart.js, Rechart, and implemented ArcGIS for integrating the map components for improving the UI/UX.
- Implemented web accessibility by following the WCAG2 and multi-language support with React-i18next.
- Improved the performance by 7% by combining the **Server-side/Client-side components** effectively and integrating **CDN** to manage the assets properly.
- Delivered efficient data fetching and caching strategies, leveraging **RESTful APIs** and **GraphQL** with **Typescript**, **Python**, and **Go** based on a microservice architecture.
- Designed and utilized data models and query patterns for SQL and NoSQL databases, including PostgreSQL, MongoDB, DynamoDB, and Redis.
- Built custom auth-wall that supports different types of OAuth (Google, Outlook, GitHub...) solutions.
- Set up message brokers like **Kafka** and **RabbitMQ** for asynchronous communication between services, enhancing application responsiveness.
- Utilized ElasticSearch to provide personalized recommendation based on user's actions.
- Integrated the LLMs (GPT, Claude, Gemini...) for implementing the AI-related functionalities.
- Configured **CI/CD** pipelines with **Jenkins** and **CircleCI**, integrating them with **GitHub** for streamlined deployment processes.
- Implemented Test-Driven Development (TDD) using Jest, Pytest for unit testing and Playwright for E2E testing, while utilizing BrowserStack to ensure cross-browser compatibility.
- Led a team of 8 engineers across 7 different project initiatives.

## PROFESSIONAL EXPERIENCE

#### Senior Software Engineer

#### Refersion

Developed a monitoring dashboard for managing deliveries and traffics in affiliate tracking and management platform.

- Built new dashboard for the analytics of deliveries and monitoring the delivery traffics with React, Typescript, Tailwind CSS.
- Maintained the legacy application built with Vue3, Vuetify and VueX.
- Collaborated with Data Scientists to implement data processing pipelines in the platform, utilizing technologies such
  as Python, TensorFlow, and natural language processing algorithms.
- Designed and deployed AWS Lambda functions using a serverless framework with Python to facilitate the integration of machine learning models.
- Developed and implemented RESTful APIs using Python to ensure seamless communication between frontend and backend systems and implemented documentation using Swagger.
- Set up Apollo GraphQL server with NodeJS and Typescript and integrated GraphQL queries and mutations on the frontend
- Integrated PostgreSQL database with ORM frameworks like SQLAlchemy to efficiently store and retrieve data for analysis and decision-making.
- Implemented DevOps practices using Docker and Kubernetes to streamline deployment processes and enhance
  the scalability and reliability of AI features on the platform.
- Provided mentorship to 3 junior engineers.

### Software Engineer

#### **Goldman Sachs**

Enhanced the GS Risk & Analytics platforms for pricing, risk management and portfolio optimization.

- Developed over 60 standardized components using **React**, **Typescript**, **Material UI** and **Storybook** and released them as a UI library for internal company use.
- Delivered a dynamic, user-friendly, high-performance multi-browser compatible frontend application utilizing **HTML/CSS**, **React**, **Next.js** and **Typescript**.
- Collaborated with design teams to translate pixel-perfect UI designs using Figma.
- Designed database schemas to support various roles and permissions, leveraging **PostgreSQL** and integrated them using **Prisma**.
- Maintained application performance by creating and managing **Prometheus** dashboards for real-time monitoring and alerting.
- Setup virtual environment and containerization using Docker and Kubernetes.
- Conducted unit testing using **Jest** to ensure project quality.

#### Frontend Developer

#### **Amazon**

Developed responsive web applications and optimized frontend performance for Amazon using React, Typescript, and AWS services while maintaining high code quality standards.

- Built lightweight web and mobile platform applications using HTML/CSS, React, React Native and Typescript.
- Built reusable UI components that improved developer productivity and ensured consistent design.
- Implemented **client-side validation** to enhance user experience and reduce form submission errors.
- Leveraged AWS services to optimize content delivery and user experience.
- Implemented automated testing using **Mocha**, maintaining 80% code coverage.
- Enhanced **web accessibility** and optimized frontend performance by implementing **lazy loading** techniques, code splitting and asset optimization, reducing page load time by 8%
- Designed a highly maintainable and scalable architecture through well-structured UI, API services and database design.

#### **EDUCATION**



Master of Computing (Computer Science Specialisation) **National University of Singapore** 

**4.9** / 5.0

**=** 01/2014 - 06/2015



**Bachelor of Computing (Computer Science)** 

**National University of Singapore** 

**=** 01/2010 - 01/2014

# **SKILLS**

#### Languages

HTML/CSS, Javascript, Typescript, Python, Go, C/C++, C#

#### Frontend Frameworks, State Management

React, Next.js, Remix, Vue, React Native, Expo, Electron, Nuxt.js, Angular, Redux, Recoil, MobX, Zustand, Jotai

#### Styles, Data Visualization

D3.js, Chart.js, ReChart, EChart, Material UI, Tailwind CSS, ShadCN, Radix UI, NextUI, Storybook, ChakraUI, AntD, Ionic, Figma, Sketch

#### **Backend Frameworks**

Node.js, Express.js, Nest.js, FastAPI, Django, Flask, Gin, Echo, RESTful API, GraphQL, Swagger

#### Database, ORM

MySQL, PostgreSQL, MongoDB, SQLite, Redis, Dynamo, Firestore, Prisma, SQLAlchemy

#### Cloud Services, Infrastructure, Testing, LLM

AWS, GCP, Superbase, Firebase, Docker, Kubernetes, ElasticSearch, Jest, Playwright, BrowserStack, GitHub Actions, Jenkins, Circle CI, Kafka, RabbitMQ, DataDog, Sentry, Grafana, Prometheus, LLM (OpenAI, Anthropic)