CESAR VALENCIA

Senior Software Engineer | Startup Specialist | Building Next-Gen Software Solutions | Cross-Platform App Development

📞 +1 206 647 7441   @ cvalencia9943@gmail.com   🔗 https://cesar-developer-portfolio.vercel.app
🔗 https://github.com/cvalencia9443   📍 Kent, WA, US 98042   ☆ https://calendly.com/cvalencia9943/30min

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 **Chart.js**, **ReChart**, and **D3.js**, enhancing the data insights through the improved UI/UX with **localization** and **web accessibility** principles.
- **Back-end development** with **Node.js**, **Express.js**, **Nest.js**, **FastAPI**, **Django**, and **Go**, 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 **RESTful APIs** and **GraphQL**, and configured secure authentication using services like **Okta**, **AWS Cognito**, **SuperToken**, and **Zitadel**; managed **cloud infrastructure** (**AWS**, **GCP**) with **IaC tools** (**Terraform**, **AWS-CDK**).
- Integrated 3rd-party services (**Stripe**, **Hubspot**, **Shopify**, etc.) into the application to enhance the functionality.
- Committed to **Test-Driven Development (TDD)** using **Jest**, **Cypress**, **Pytest**, and **Playwright**, delivering high-quality code quickly while adapting to new technologies.
- Integrated GenAI models (**OpenAI**, **Anthropic**, **Gemini**, etc) for implementing AI-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)

BigRio

📅 04/2022 - Present   📍 Boston, United States (Remote)

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
H2O.ai

📅 01/2019 - 04/2022   📍 Mountain View, United States (Remote)

Developed a low-code visualization platform enabling real-time dashboards, declarative UI, and Python-based extensibility.

- Implemented pixel-perfect, mobile-responsive UI using **Vue3**, **MUI** and built highly organized state-management logic with **VueX**.
- Collaborated with Data Scientists to implement data processing pipelines in the platform, utilizing technologies such as **Python**, **FastAPI**, **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**.
- Integrated **PostgreSQL** database with **ORM** frameworks like **SQLAlchemy** to efficiently store and retrieve medical 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.

Full Stack Engineer
Auth0

📅 08/2016 - 01/2019   📍 Bellevue, United States (Hybrid)

Enhanced the Auth0 platform with improved UX/UI and security solutions, and developed a community platform.

- 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**.
- Set up **Apollo GraphQL** server and integrated **GraphQL** queries and mutations on the frontend.
- 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

📅 06/2015 - 08/2016   📍 Seattle, United States (On-Site)

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

📅 01/2014 - 06/2015

GPA
4.9 / 5.0

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)