**JOSHUA CHARLES CALDWELL**

**PROFILE SUMMARY**

Versatile and results-driven Senior Frontend Developer with over a decade of experience designing and building scalable, high-performance web applications. Specialized in front-end development with React, combined with strong backend expertise in Node.js and cloud platforms like AWS. Adept at delivering robust, maintainable solutions across the full software development lifecycle. Recognized for sharp problem-solving skills, attention to detail, and consistent delivery of quality code in Agile, fast-paced environments. Proficient in modern web technologies, CI/CD practices, and cloud-native architecture.

**EDUCATION**

* Bachelor's Degree, VISTA college, El Paso- Sep 2010 - Aug 2014
* Programming Languages: C, C++, Java, Python
* Algorithms & Data Structures, Web Development, and Modern Internet Technologies
* Operating Systems Architecture, Computer Networks, and Device Driver Programming
* Distributed Database Management, Database Design & Administration
* Information Security, Artificial Intelligence, and Cloud Computing
* Analytical Mathematics and Applied Problem Solving

**TECHNICAL SKILLS**

* JavaScript, TypeScript
* Python
* Java, Spring Boot
* C#, .NET
* C/C++, Golang
* React, Angular, Vue, Next.js
* jQuery, HTML, CSS, Bootstrap, Material-UI, Chakra UI, Tailwind CSS
* Node.js/Express
* Django, Flask
* Laravel, CodeIgniter, Symphony
* MySQL, PostgreSQL, Oracle, DB2
* MongoDB, DynamoDB
* AWS, Azure, Google Firebase, GCP
* Kubernetes, Docker, GIT, Jenkins (CI/CD)

**PROFESSIONAL EXPERIENCE**

**PlanHub, West Palm Beach, FL Apr 2017 — Jul 2025**

**Senior Frontend Developer**

* Worked at PlanHub, a leading preconstruction software platform, where I contributed to enhancing tools for bid management, project discovery, and contractor collaboration, supporting a network of over 500,000 construction professionals. Helped improve platform usability and feature integration to streamline the bidding and estimation workflow.
* Developed and implemented scalable, high-performance React.js applications using JavaScript, TypeScript, Redux, Redux-Saga, HTML5, and CSS3; optimized rendering efficiency, ensured smooth asynchronous data handling, and enhanced user experience across modern browsers and devices.
* Developed and optimized high-performance web applications using Next.js, leveraging Server-Side Rendering (SSR), Static Site Generation (SSG), Incremental Static Regeneration (ISR), and Automatic Static Optimization to improve SEO, reduce Time to First Byte (TTFB), and enhance user experience across various devices and network conditions.
* Implemented dynamic routing, API routes, and Next.js Image Optimization, while integrating React.js, TypeScript, and Node.js to deliver scalable, responsive, and SEO -friendly applications with efficient real-time and static content handling.
* Designed, deployed, and scaled secure, cloud-native applications using AWS services such as EC2, S3, Lambda, API Gateway, RDS, CloudFront, and Elastic Beanstalk.
* Leveraged advanced React.js and ES6 + features to build scalable front-end architecture, using hooks such as useState, useEffect, useContext, useReducer, useMemo, useCallback, and useRef to manage component state, handle lifecycle events, optimize rendering performance, and enhance code modularity and reusability in enterprise-level applications
* Followed AWS best practices by automating infrastructure with CloudFormation, managing access control via IAM, and ensuring system reliability through monitoring, logging, and alerts with CloudWatch and SNS.
* Architected and integrated micro frontends for seamless UI collaboration across distributed front-end teams.
* Deployed and maintained applications on AWS using EC2, S3, and Lambda, optimizing infrastructure for scalability and cost-efficiency.
* Developed scalable, high-performance backend services using Node.js, ES6 +, and Express.js, creating RESTful API s and integrating with relational and NoSQL databases including MySQL and MongoDB.
* Collaborated with Agile Scrum teams to deliver high-quality features through iterative development, participating in sprint planning, daily standups, and retrospectives to ensure continuous improvement and alignment with business goals.
* Designed and developed both RESTful and GraphQL API endpoints following industry best practices to enable secure, scalable, and efficient communication between frontend and backend systems.
* Crafted responsive, cross-device web interfaces using modern CSS techniques such as Flexbox, CSS Grid, and media queries, combined with frameworks like Tailwind CSS and Bootstrap for rAPId UI development.
* Integrated third-party APIs and microservices, managed data flow and error handling, and maintained clear API documentation using Swagger and GraphQL schema definitions.
* Implemented end-to-end DevOps practices by building automated CI/CD pipelines using Jenkins, GitLab CI, and AWS CodePipeline for efficient testing, building, and deployment workflows.
* Optimized front-end and back-end performance by applying advanced techniques including memorization, dynamic code-splitting, lazy loading, and Higher-Order Components (HOCs); utilized efficient data structures and algorithms to improve application responsiveness, reduce load times, and boost overall system efficiency.
* Utilized asynchronous programming patterns with Promises, async/await, and Express middleware to efficiently handle I/O-bound operations and ensure non-blocking architecture for real-time applications.
* Optimized API performance and scalability by implementing caching strategies with Redis, reducing response times and server load. Strengthened backend security using JSON Web Tokens (JWT) for authentication, secure token storage, and access control across protected routes.
* Developed modular, high-performance user interfaces using React and Next.js, implementing reusable components in TypeScript and JavaScript.
* Built scalable Java Spring microservices to support RESTful APIs consumed by modern front-end frameworks.
* Containerized front-end and back-end services with Docker, enabling consistent development and production environments.
* Participated in Agile sprints, collaborating with designers, product managers, and cross-functional engineers in daily standups and code reviews.
* Optimized application performance and reliability through proactive debugging, API tuning, and full-stack profiling.
* Implemented CI/CD workflows and Git-based release strategies to support continuous integration and streamlined deployment.
* Worked with MySQL and MongoDB databases, integrating structured and unstructured data storage into microservices architecture.
* Explored advanced integrations such as GraphQL and WebSocket to enhance data exchange patterns between front-end and back-end systems.
* Leveraged Docker and Kubernetes for containerization and orchestration across development and production environments, and managed infrastructure as code (IaC) with Terraform and AWS CloudFormation to provision, configure, and monitor scalable cloud infrastructure.
* Enhanced styling maintainability and scalability by using SASS/SCSS preprocessors and CSS -in- JS solutions like styled components and Emotion within large-scale React applications.
* Designed and optimized relational databases using MySQL and PostgreSQL by implementing normalized schemas, efficient indexing, and performance-tuned queries for scalable data management.
* Additionally, worked with NoSQL databases like MongoDB and DynamoDB, designing flexible, schema-less data models to support high-throughput, unstructured data storage in modern web applications.
* Developed and maintained robust u nit and integration tests using Jest, Mocha, and Enzyme to ensure code quality, reliability, and early bug detection across frontend and backend systems.
* Leveraged React Testing Library and Enzyme to simulate user interactions and validate UI component behavior, improving application stability and maintainability through test-driven development (TDD) practices.
* Developed high-performance backend services using Java and Spring Boot, building scalable RESTful APIs to support high-traffic, enterprise-grade applications.
* Improved application efficiency through advanced multithreading, memory optimization, and implemented comprehensive unit and integration tests with JUnit and Mockito to ensure code quality and maintainability.

**Kony, Inc, Austin, TX Jun 2015 — Mar 2017**

**Senior Frontend Developer**

* Developed cross‑platform mobile and web applications using the Kony Quantum low‑code platform (Kony Visualizer + Kony Fabric), leveraging reusable widgets, APIs, orchestration services, and offline capabilities to deliver omni‑channel, enterprise‑grade digital experiences. Designed and integrated backend services—including identity, data orchestration, engagement (push notifications), and analytics—ensuring scalable, secure, and performant delivery across mobile, web, conversational, and wearable interfaces.
* Worked as a Frontend Developer to design, develop, and maintain a responsive web platform using React.js and Angular to deliver seamless user experiences.
* Built reusable UI components with Storybook, reducing redundant code by 70%, and implemented state management and side effects using Redux and Redux-Saga.
* Integrated RESTful APIs, collaborated closely with backend, QA, and design teams, and applied Motion UI for intuitive frontend animations.
* Conducted unit and load testing to improve stability, reducing system failure rate by 70%. Utilized modern JavaScript (ES6+), Webpack, Babel, and optimized builds for performance.
* Deployed and monitored applications using both Google Cloud Platform (GCP) and Microsoft Azure services to ensure scalability and availability.

**Mercado Labs, Dallas, TX Nov 2014 — May 2015**

**Frontend Developer**

* Conducted field and laboratory research on marine, freshwater, and terrestrial ecosystems—applying demographic monitoring, physiological assays, and experimental techniques to drive evidence-based conservation and restoration efforts. Designed quantitative population models and integrated biochemical and ecological data to support decision-making, communicate scientific findings, and advance ecosystem resilience in tropical habitats.
* Developed a responsive, SEO -friendly web platform and Outlook plugin using React, Redux-Saga, and server-side rendering to support ecosystem data visualization and collaboration.
* Optimized PostgreSQL queries for high-concurrency access, enforced schema consistency across backend and frontend using TypeScript and JOI, and implemented secure environments leveraging GCP infrastructure.
* Integrated user behavior tracking with Hotjar and Amplitude, enhanced UX with Motion UI and animations, and collaborated closely with researchers to deliver scalable, data-driven tools for tropical conservation initiatives.
* Designed and implemented data dashboards to visualize ecological trends and field research metrics, enabling scientists to derive insights and publish findings more efficiently.
* Automated deployment workflows and managed CI/CD pipelines to streamline feature delivery and ensure stability across development, staging, and production environments.