Adam W. Kilber

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**Summary**

Results-driven Software Engineer with 18+ years of expertise in web architecture, software development, and team leadership. Demonstrated success in designing and implementing high-performance, resilient systems, and leading high-performing development teams. Adept at leveraging a wide range of modern technologies to create scalable and efficient solutions across various industries.

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**Summary of Qualifications**

**Proven Leadership:** Extensive experience in building and managing successful development teams, both locally and globally.

**Technical Expertise:** Deep understanding of modern web technologies and methodologies, with strong proficiency in both front-end and back-end development.

**System Architect:** Expert in designing and optimizing systems for performance, high availability, and seamless user experiences. Skilled in microservices architecture, serverless architecture, and event-driven architecture.

**Project Management:** Strong background in Agile methodologies, including Scrum and Kanban, ensuring efficient project delivery and continuous improvement.

**Innovation and Optimization:** Consistently recognized for delivering innovative solutions that enhance system performance, reliability, and scalability. Proven track record of reducing operational costs and improving user satisfaction.

**Security and Compliance:** Adept at implementing robust security measures and ensuring compliance with industry standards, such as WCAG.

**Continuous Integration and Deployment:** Extensive experience in setting up and maintaining CI/CD pipelines to streamline development and deployment processes.

**Cross-Platform Development:** Skilled in developing solutions that integrate seamlessly with diverse platforms and technologies.

**Client-focused Solutions:** Demonstrated ability to understand client needs and deliver customized, high-quality solutions that drive business success.

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**Professional Experience**

**Sorenson Communications | Senior Software Engineer (Contract)** July 2024 – February 2025

* Contributed to the frontend and real-time call logic for Mercury, a WebRTC-based platform enabling Sorenson translators to facilitate voice and video calls for deaf clients.
* Helped maintain duplexed WebRTC streams to support audio, video, and data communication between employees and external contacts.
* Improved cross-platform compatibility and stability, increasing session reliability and reducing connection errors across third-party clients.
* Maintained and extended complex UI workflows tied to real-time queue and routing behavior under strict federal compliance standards.
* Participated in a high-regulation development lifecycle, with mission-critical rollout cycles governed by FCC-level requirements and rigorous automated test coverage.

Technologies used: JavaScript, React, Redux, Node.js, WebRTC, CI/CD (GitHub Actions), VI testing, Figma

**Keen Software | Owner** July 2023 – Present

* Developed custom stock, options, and crypto indicators for a private investor.
  + Collaborated closely with the investor to understand their unique trading strategies and requirements.
  + Delivered indicators that significantly enhanced the investor’s ability to make informed trading decisions, resulting in a notable increase in portfolio performance.
  + Utilized advanced statistical techniques to refine the indicators’ predictive capabilities.
* Created a pipeline for processing technical indicators on live streaming financial data using Node.js and Rust.
  + Designed and implemented a robust data pipeline capable of handling high-frequency financial data streams.
  + Achieved low-latency processing, ensuring real-time analysis and decision-making for the investor.
  + Leveraged multi-threading and asynchronous processing to maximize performance and efficiency.
* Built a React front end for configuration, managed processing nodes in a pipeline with ZeroMQ for message processing, and connected to a broker API for trading.
  + Developed a user-friendly interface that allowed the investor to easily configure the technical indicators.
  + Enabled seamless integration with the trading platform, automating the execution of trades based on real-time data.
  + Implemented state management using React ensuring a responsive and dynamic user experience.

Technologies used: Rust, Node.js, Express, React, Hooks, ZeroMQ, Polygon.io, WebSockets, echarts, Redis, MongoDB, Docker Git, GitHub

**Veritext | Lead Software Engineer** July 2022 – July 2023

* Led a dynamic team on special projects, excelling in both front-end and back-end development.
  + Managed a team of developers to tackle high-priority projects requiring expertise across the entire tech stack.
  + Successfully delivered multiple projects on time, meeting high-quality standards and client expectations.
  + Adopted Agile methodologies to ensure iterative progress and continuous delivery, conducting regular code reviews and team meetings.
* Architected and built a highly parallel long-running video and document compression service using Kafka.
  + Developed a service to handle large compression tasks for video and document files on demand.
  + Enhanced the efficiency and reliability of the compression service, allowing for dynamic parallel processing and significant reduction in system requirements and significant improvement of performance.
  + Utilized Kafka for data streaming and processing, ensuring that the system could handle high volumes of requests concurrently.
* Built an automated billing system integrating daily bank reports.
  + Designed a comprehensive billing solution to automate financial reporting and transactions.
  + Streamlined billing processes, reducing manual intervention by 80% and ensuring accurate and timely financial reporting.
  + Integrated various APIs and utilized ETL processes to automate data extraction, transformation, and loading. Ensured the system’s scalability and reliability using Docker and Kubernetes.

Technologies used: Node.js, TypeScript, Express, GraphQL, React, Redux, MongoDB, MS SQL, Redis, Kafka, FTP, S3, IAM, SQS, SES, SNS, Cognito, Docker, Kubernetes, Jenkins, Jest, Git, GitHub, CI/CD

**Keen Software | Owner** September 2021 – July 2022

* Built features into a web portal for a company providing online services for private clinics.
  + Worked with a client to enhance their web portal, which offers various online services to private clinics.
  + Delivered new features that improved the portal’s functionality and user experience, leading to increased client satisfaction and engagement.
  + Conducted requirements analysis and collaborated closely with stakeholders to ensure the new features aligned with their needs. Implemented continuous integration and deployment practices to deliver updates efficiently.
* Developed a video conferencing system using WebRTC and WebSockets.
  + Created a secure and reliable video conferencing solution to facilitate virtual consultations and meetings.
  + Enabled high-quality video communication, reducing the need for physical visits and improving accessibility for patients and clinic staff.
  + Leveraged WebRTC for real-time video and audio communication, and WebSockets for low-latency data transmission. Ensured the system’s scalability and security through thorough testing and optimization.
* Implemented barcode scanning for authentication during at-home tests.
  + Developed a system to authenticate at-home test results using barcode scanning, enhancing the integrity of the testing process.
  + Increased the accuracy and security of test result authentication, providing clinics with a reliable method to verify at-home tests.
  + Utilized QuaggaJS for barcode scanning and integrated it with the web portal to provide seamless authentication. Ensured compatibility with various barcode formats and devices.

Technologies used: Node.js, TypeScript, Express, GraphQL, React, React Native Hooks, MongoDB, Redis, Kafka, WebSockets, WebRTC, QuaggaJS, Docker, Jest, Jenkins, AWS (EC2, S3, Lambda, CloudFront), Git, GitHub, CI/CD

**ProPoint Solutions | Lead Software Engineer**

January 2020 – September 2021

* Led a global team of developers in modernizing the Super Salon platform.
  + Managed a diverse team across global time zones to update and enhance the Super Salon platform, used by thousands of salons.
  + Successfully coordinated the development efforts, ensuring timely delivery of features and improvements, resulting in increased platform stability and user satisfaction.
  + Employed Agile development practices, including daily stand-ups and sprint planning, to maintain effective communication and project management. Conducted code reviews and implemented best practices to ensure code quality.
* Architected and oversaw the front end development of a high-performing, cloud-based replacement solution for the entire Super Salon platform.
  + Led the redesign and development of a comprehensive system, enhancing the user experience for salon staff and customers. The new system included calendaring, customer management, stylist scheduling, service management, product management, and point of sales.
  + Delivered a highly responsive and user-friendly solution, significantly improving the efficiency of booking and managing appointments, as well as overall salon operations.
  + Utilized React for building the user interface, incorporating dynamic animations and push notifications. Ensured smooth performance and scalability with optimization techniques and thorough testing.
* Built microservices to provide new features while remaining backward compatible with the legacy system.
  + Developed a microservices architecture to introduce new functionalities without disrupting existing services.
  + Successfully integrated new features, enhancing the platform’s capabilities while maintaining compatibility with legacy systems, thereby minimizing disruption for users.
  + Designed and implemented RESTful APIs using Node.js and Express, and employed Docker and Kubernetes for containerization and orchestration. Ensured data consistency and reliability with robust database management practices.

Technologies used: Node.js, TypeScript, Express, GraphQL, React, React Native, Hooks, MySQL, MongoDB, Redis, Kafka, JWT, WebSockets, Docker, Kubernetes, AWS (EC2, S3, Lambda, CloudFront, Route53, Cognito, Load Balancer), Auth0, Jest, Puppeteer, GitLab CI/CD, Terraform, Ansible, Git, GitHub

**Best Buy | Senior Software Engineer**

June 2018 – January 2020

* Built the “hot offers” application for custom bundle recommendations.
  + Developed a new application to provide personalized bundle recommendations to users, enhancing their shopping experience.
  + Increased user engagement and sales through effective custom bundle recommendations.
  + Leveraged Node.js, React, and Redux to build a robust and scalable application, ensuring seamless integration with the existing platform.
* Enhanced DNS caching to improve failover handling, reducing server load by over 40%.
  + Addressed performance and reliability issues related to DNS caching and failover handling.
  + Achieved a significant reduction in server load and response times, enhancing the overall performance and reliability of the website.
  + Implemented advanced DNS caching strategies and optimized failover mechanisms using low-level Node.js code to ensure high availability and performance.
* Refactored the pricing app to add dynamic version loading and migrated business logic into hooks for better compatibility with React Native.
  + Undertook a major refactoring project to modernize the pricing application and improve maintainability and performance.
  + Increased the application’s flexibility and performance by implementing dynamic version loading and migrating business logic into a centralized format using React Hooks to be compatible with React Native.
  + Applied modern JavaScript practices and React Hooks to streamline the codebase, resulting in improved maintainability and scalability.

Technologies used: Node.js, TypeScript, Express, Falcor, React, React Native, Redux, Hooks, Jest, React Native, Jenkins, AWS (EC2, S3, Lambda, CloudFront), Docker, Kubernetes, Git, GitHub, CI/CD

**Optum | Senior Software Engineer**

June 2017 – June 2018

* Part of the development team for the Global Header for a unified user experience across various Optum portal products.
  + Contributed to a cross-functional team developing a Global Header and Footer that had to integrate seamlessly with a wide variety of portals running on different technologies, including Angular applications, WordPress websites, Microsoft MVC sites, and Drupal.
  + Successfully delivered a cohesive and seamless navigation experience, enhancing user satisfaction and engagement.
  + Collaborated with designers and product managers to align with the overall user experience strategy. Implemented the header and footer using React and Redux, ensuring compatibility across diverse frameworks.
* Ensured the project met WCAG 2.1 AA compliance and achieved over 80% unit test coverage.
  + Focused on accessibility and quality assurance to meet industry standards and deliver a reliable product.
  + Ensured that the project adhered to WCAG 2.1 AA standards, improving accessibility for all users. Achieved over 80% unit test coverage, enhancing the code’s reliability and maintainability.
  + Conducted thorough accessibility audits and testing. Implemented unit tests using Jest, covering critical components and functionalities to ensure high-quality code.
* Refactored the codebase to introduce utilities like Immutable and Redux.
  + Undertook a refactoring initiative to modernize the codebase and improve its maintainability and performance.
  + Enhanced the performance and scalability of the application by introducing modern utilities like Immutable and Redux, resulting in more efficient state management.
  + Applied best practices for state management and immutability, leveraging Immutable.js and Redux to streamline the codebase and enhance its performance.

Technologies used: React, Redux, Immutable, Angular, AEM, Jest, Git

**Sports Hub Technologies | Senior Software Engineer**

June 2016 – June 2017

* Developed a fantasy sports application providing real-time and historical data.
  + Part of a team that developed a feature-rich fantasy sports application to deliver real-time and historical sports data to users.
  + Successfully built and deployed a high-performance application that handled large volumes of data and provided users with an engaging and interactive experience.
  + Leveraged React and Redux for a responsive and state-managed front end. Used GraphQL to efficiently fetch and manage data, ensuring real-time updates and seamless user interaction.
* Ensured pixel-perfect UX following designer specifications.
  + Collaborated closely with UX/UI designers to implement a precise and visually appealing user interface.
  + Delivered a pixel-perfect user experience that met all designer specifications, enhancing the application’s overall look and feel.
  + Employed meticulous attention to detail and thorough testing to ensure that the UI matched design mockups exactly. Utilized CSS and modern front-end techniques to achieve the desired visual effects.
* Early adopter of GraphQL and Redux; Implemented CI/CD for front-end development.
  + Introduced and implemented new technologies and practices to improve the development workflow and application performance.
  + Improved data management and state handling with GraphQL and Redux, leading to a more efficient and maintainable codebase. Established a CI/CD pipeline to streamline development and deployment processes, reducing time-to-market for new features.
  + Set up and maintained CI/CD pipelines using Jenkins, ensuring automated testing and continuous integration. Applied best practices for using GraphQL and Redux to optimize data fetching and state management.

Technologies used: React, Redux, Immutable, GraphQL, Jest, Jenkins, CI/CD, Git, GitHub

**Triedstone Technologies | Owner**

March 2012 – June 2016

* Founded and operated a successful software development studio specializing in custom web applications using the MERN stack.
  + Established and led a development studio that delivered bespoke web applications to a variety of clients.
  + Grew the studio into a profitable business, securing multiple high-profile clients and delivering numerous successful projects.
  + Employed the MERN (MongoDB, Express, React, Node.js) stack to build scalable and efficient web applications. Managed all aspects of the business, from client acquisition to project delivery and team management.
* Built an entire web marketing system leveraging cutting-edge web tech for an advertising agency.
  + Designed and developed a comprehensive marketing system to streamline the advertising processes for a client.
  + Delivered a powerful marketing platform that enhanced the agency’s ability to manage campaigns, track performance, and engage with customers.
  + Utilized modern web technologies, including React and Node.js, to build a responsive and feature-rich application. Implemented robust backend services using Express and MongoDB to handle large volumes of marketing data.
* Developed a white-labeled assessment tool for a job coaching agency.
  + Created a versatile and customizable assessment tool to support the agency’s job coaching services.
  + Enabled the agency to offer personalized assessments and actionable insights to their clients, improving their job placement rates.
  + Built the tool using React for the front end and Node.js for the backend. Incorporated a flexible architecture to allow easy customization and white-labeling for different clients.
* Created a GPS-aware notes and sales processing tool for a trash collection company.
  + Developed a mobile-friendly tool to help the client manage notes and sales processes based on GPS location data.
  + Improved the efficiency and accuracy of the company’s operations, resulting in better service delivery and customer satisfaction.
  + Leveraged Cordova to develop a cross-platform mobile application. Integrated GPS functionality and real-time data processing to provide location-based insights and automation.

Technologies used: C#, Node.js, React, jQuery, Express, Semantic UI, Sencha, Ext JS, PostgreSQL, MongoDB, Redis, AWS (S3, CloudFront, Route53, Lambda, EC2, Load Balancer), PayPal, Twilio, D3.js, Cordova, Git, GitHub,

**OATI | Lead Software Engineer**

September 2007 – March 2012

* Quickly promoted to Lead Engineer of the Web Support team, overseeing a team of up to twelve developers in both the US and India.
  + Took on a leadership role to manage and mentor a geographically dispersed team, ensuring successful project delivery and collaboration.
  + Effectively managed the team, improving productivity and cohesion. Successfully delivered multiple projects on time and within budget.
  + Implemented Agile methodologies to enhance team collaboration and project management. Conducted regular code reviews and team meetings to maintain high standards of code quality and communication.
* Made strategic decisions on using version control, team code reviews, and front-end frameworks.
  + Evaluated and implemented key technologies and practices to improve development efficiency and code quality.
  + Enhanced the team’s workflow and code quality through the adoption of version control (SVN), regular code reviews, and the use of modern front-end frameworks.
  + Analyzed team needs and industry best practices to select appropriate tools and frameworks. Provided training and guidance to ensure successful adoption and usage.
* Built a modular “widget” style dashboard used by every employee.
  + Developed a versatile and user-friendly dashboard to provide employees with easy access to critical information and tools.
  + Improved employee productivity and satisfaction by delivering a customizable and efficient dashboard solution.
  + Designed the dashboard with a modular architecture, allowing for easy customization and scalability. Used JavaScript, jQuery, and Ext JS to build interactive and responsive widgets.
* Developed a new SSL encryption system for customers and a custom XMPP subsystem used for internal communication.
  + Enhanced security and communication systems to meet customer needs and improve internal collaboration.
  + Delivered a robust SSL encryption system that enhanced customer data security. Implemented a custom XMPP subsystem to facilitate secure and efficient internal communication.
  + Applied best practices in security and encryption to develop the SSL system. Leveraged XMPP protocols to build a reliable and secure internal messaging system.
* Rebuilt the internal bug and ticketing system for better business accommodation.
  + Improved the company’s internal bug tracking and ticketing system to enhance workflow and issue resolution.
  + Increased the efficiency of the support and development teams by providing a more effective and user-friendly bug and ticketing system.
  + Redesigned the system architecture to improve usability and performance. Used ASP and MS SQL to develop a scalable and reliable solution.

Technologies used: ASP, MS SQL, JavaScript, jQuery, YUI, Ext JS, XMPP, SVN, Git, GitHub

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**Skills**

**Technologies**

* Programming Languages: JavaScript, TypeScript, Node.js, Python, C#, Rust
* Front-End: React, Redux, jQueryUI, HTML5, CSS3, Bootstrap, Material-UI
* Back-End: Node.js, Express.js, GraphQL, RESTful APIs
* Database: MongoDB, PostgreSQL, MySQL, Redis, MS SQL
* DevOps: Docker, Kubernetes, Jenkins, CircleCI, Travis CI, Ansible, Terraform
* Messaging & Streaming: Kafka, ZeroMQ, RabbitMQ, MQTT
* Web Technologies: WebRTC, WebSockets, HTTP/2, AJAX, JSON, XML
* Testing Frameworks: Jest, Mocha, Chai, Enzyme, Cypress, Selenium
* Security: SSL/TLS, OAuth, JWT, SAML, CSRF, XSS Prevention
* Cloud Services: AWS (EC2, S3, Lambda, RDS, CloudFront), Azure

**Leadership**

* Team Building
* Strategic Planning
* Project Management (Agile, Scrum, Kanban)
* Code Reviews
* Best Practices Implementation
* Mentoring & Coaching
* Cross-functional Team Leadership
* Conflict Resolution
* Stakeholder Management

**Systems Design**

* Web Architecture
* High Availability Systems
* Performance Optimization
* Scalability
* Security
* Microservices Architecture
* Serverless Architecture
* Event-Driven Architecture
* Distributed Systems
* Load Balancing
* Caching Strategies

**Tools**

* CI/CD: Jenkins, CircleCI, Travis CI, GitHub Actions, GitLab CI
* Version Control: SVN, Git, GitHub, GitLab, Bitbucket
* Test Automation: Selenium, Jest, Mocha, Chai, Enzyme
* Agile Methodologies: Scrum, Kanban, SAFe
* DevOps: Docker, Kubernetes, Ansible, Jenkins, CircleCI
* Monitoring & Logging: ELK Stack (Elasticsearch, Logstash, Kibana), Splunk