

Mason Meyer

(541) 979-8306 ● Portland, OR ● mason.meyer@gmail.com ● [linkedin.com/in/-mason-meyer](https://www.linkedin.com/in/-mason-meyer) ● github.com/mmeyer23

SKILLS

Node.js, JavaScript (ES6+), TypeScript, Express, HTML5, CSS3, React, Redux, NoSQL (MongoDB/Mongoose), Python, Chart.js, Jest, C++, CI/CD (Github Actions), SQL (PostgreSQL), AWS (EC2, EKS), Vite, Git/Github, MiniKube, Webpack, Material UI, Docker, Kubernetes, SASS, TailwindCSS, Trello, Jira, Mocha

EXPERIENCE

PodMD ● Software Engineer

Sep. 2024 - Present

- Utilized Prometheus and PromQL for efficient metric aggregation from EKS clusters, harnessing Prometheus' robust Kubernetes integration and query flexibility to monitor pod health metrics and compare against users selected parameters in order to determine pod restart timing.
- Developed real-time pod metric visualizations with Chart.js, leveraging its lightweight, high-performance rendering capabilities to enhance the interactive user experience, streamline monitoring of Kubernetes pod performance, and accelerate troubleshooting for faster, data-driven decision-making.
- Integrated the Kubernetes client library for Node.js to programmatically manage AWS-hosted clusters, selected for its native compatibility with the Kubernetes API and seamless integration with Node.js, enhancing deployment efficiency, reducing downtime, and improving resource utilization.
- Engineered a dynamic and user-centric frontend using React, utilizing state management with the Context API to efficiently handle real-time user-configured parameters, enabling seamless transmission of configurations to the backend and automatic updates of data visualizations.
- Implemented a modular middleware pattern in Express to process frontend parameters, chosen for its flexibility and scalability in managing dynamic routes and handling complex request flows. This approach streamlined the management of CPU and memory configuration updates, improved code maintainability, simplified debugging, and automated pod management via the Kubernetes API.
- Built and executed unit and integration tests for the backend using Jest, employing its built-in mocking capabilities to simulate Prometheus queries and Kubernetes actions, and its robust asynchronous support to ensure reliable testing of data handling and pod restart logic under various conditions.
- Set up CI/CD pipelines with GitHub Actions for automated testing and deployment, using its seamless integration with GitHub. The pipeline runs Jest tests on dev pull requests and automates Docker and AWS deployments, ensuring fast code validation and reliable production updates.
- Architected a Node.js runtime using Electron for secure local desktop deployment, capitalizing on Electron's capabilities to create a controlled environment that isolates application processes and prevents unauthorized access to system resources. This approach eliminates the need to input AWS IAM credentials in a web-based app, enhancing data privacy and compliance with security standards.

The Daily Shred LLC ● Co-Founder & C.T.O.

March 2020 – Present

- Designed and implemented an automated email delivery system leveraging a cloud-based email marketing platform, utilizing APIs and integration techniques to efficiently distribute workout programs to over 2,000 subscribers, ensuring scalability and reliability in communication workflows.
- Analyzed audience behavior and response patterns through multivariate testing and data segmentation to optimize email subject lines and content, achieving a 90% increase in open rates and a 250% boost in click-through rates, utilizing Mailchimp's analytics tools for data-driven decision-making.
- Led technical presentations to government agencies, using data analytics to demonstrate service value, resulting in contracts that drove a 350% increase in user growth. Collaborated with internal teams to integrate client feedback, shaping new product features that aligned with user needs.

The Forge Fitness Studio LLC ● Web Developer, Co-Founder & C.O.O.

Jan. 2014 - Aug. 2024

- Developed and deployed a mobile-first, responsive website using React, HTML, CSS, and JavaScript, optimizing UI/UX with features like class scheduling, booking, member profiles, and real-time class stats, enabling users to track progress and view past activities from their accounts.
- Constructed automated email workflows through MailChimp API integration, sending personalized emails based on user actions (e.g., booking confirmations, class reminders, summaries) as well as MindBody and FitMetrix API integration for class bookings, stats, and heart rate tracking.
- Implemented on-page SEO best practices to enhance search engine rankings, optimizing site structure, meta tags, and content for better crawlability and indexation. Integrated Google Analytics for real-time performance tracking and data-driven optimization, increasing organic traffic by 120%.
- Formulated and automated employee onboarding processes, integrating team-building strategies and feedback loops to streamline training, enhance team performance, and align with business goals. This improved operational efficiency, employee loyalty, and contributed to a member retention rate of 80% year-over-year contributing to local recognition, including "Business of the Year" and "Best Local Gym" five times in six years.

Engineering Projects

AdventureMatch ● Software Engineer | An application for Outdoor Enthusiasts that fosters friendships based on shared hobbies and skill-levels

- Applied client-side routing with React Router in a single-page application (SPA), architecting dynamic route management to optimize state persistence across multiple views (sign-up, login, activity configuration, and nearby user components). This approach reduced page reloads, minimized latency, and ensured smooth, asynchronous transitions, enhancing app performance and user experience.
- Utilized the useRef hook to manage references to DOM elements, providing enhanced control over component interactions without triggering unnecessary re-renders, ensuring smooth transitions without full page reloads.
- Capitalized on PostgreSQL's relational capabilities and performance with large datasets to manage structured user data, enabling efficient identification of overlapping skill sets for optimal user matching, while ensuring data integrity and maintaining complex relationships beyond NoSQL alternatives.

DataWizd ● Software Engineer | An AI-powered application that automates database population with mock data for testing purposes.

- Engineered an OpenAI-powered system that leverages advanced NLP techniques to parse natural language inputs into complex SQL queries, automatically generating and executing them to populate user databases with mock data, streamlining testing and development workflows.
- Built a secure PostgreSQL database population system with safeguards against SQL injection attacks, incorporating query validation to block harmful commands, and integrated automated testing with Jest, React Testing Library, and Supertest, achieving 81% coverage to ensure system reliability.

Education

Bachelors of Science, *Magna Cum Laude* - Oregon State University 2016

Talks & Publications

[Database Optimization](#) | Scismic Tech Talk Series 2024

[PodMD - Developers Solution for Custom Kubernetes Pod Restart Configurations](#) | Medium 2024

Interests

Hiking new trails in the Pacific Northwest, Paddleboarding, Reading about new Technologies, Weightlifting, and taking my Blue Heeler to the dog park.