
Experience

Revcomm Senior Software Engineer - Full Stack 2023 - Present

Built and maintained an application to manage the authentication and management of users, including clients, their users, and of Revcomm's internal users. This includes several APIs for managing user data, and multiple front-end applications.

Created template system for login page. This new system allows the design team to adjust the login page in a variety of ways. Before this change, the team needed to manually create the changes to the login page in code. To run the additional service, I used with using fullstack Rust.

SmartNews Senior Software Engineer - Front-End 2022 - 2023

Developed a Webview component for a mobile app that could be used to display news stories and a variety of additional content that could not be handled by the native components. This was my introduction to mobile development, and I learned a lot about building web applications designed to run inside mobile applications. This project relied on vanilla JavaScript, but used Rollup and a lot of bash scripts for deployment.

Worked on a WYSIWYG editor that non-engineering employees could use to create a variety of content, such as pages displaying news related to a specific event, or new visual data components. This project used React itself, but supported adding components made by other teams which could be vanilla web components, React components, or Svelte components.

Developed internal web portal for Advertising clients to manage their ads, ad groups, and campaigns. This brought the company up to modern standards for advertisement management. It also served as a testbed for some of the latest front-end libraries, such as Vite, pnpm, and ReactQuery.

AXA Senior Software Engineer - Front-End 2020 - 2022

Developed tool to send customers automated updates on their claims via SMS. This service ran on AWS Lambda functions, and used S3 for storage some simple details, such as shorted URLs which could fit in an SMS message.

Developed an internal API authentication tool that allowed teams to secure any APIs we created in a one-size-fits-all manner. This freed up API teams from needing to design their own security measures. This tool made use of some AWS Lambda functions and some neat API Gateway configuration.

Created a web portal for employees to manage sales representative contracts, as well as project the expected payment for contracted sales reps out to six months. This project used Create React App for the front-end, and Java for the API, and a z/OS mainframe for the back-end.

Designed the architecture for a multitude of applications and tools as requested by teams throughout the company.

Became a leader for the JavaScript Community of Practices. Hosted weekly meetups for everyone to discuss the latest changes in JavaScript, discuss new tools, and have the occasional friendly bike-shed about our company-wide practices. We also held small quizzes to demonstrate useful new features, and all worked together to create the standards for front-end development at the company. Additionally, I led training sessions on topics including Next.js, internationalization, accessibility, and Redux.

Netsmile Systems Software Engineer - Full-Stack 2019 - 2020

Developed an API service layer and web portal for clients. This application allowed users to upload photos and documents, forward those files along with client configuration to an AI pipeline for OCR and image recognition tasks, then report the results to the user. This application used Next.js for the front-end, Knex.js and PostgreSQL for metadata and client config, S3 for storing copies of output files, and RabbitMQ to interface with the AI pipeline.

Bazaarvoice Senior Software Engineer - Front-End 2013 - 2019

Developed 3rd-party application to display ratings and reviews for retail clients. With over 400 million unique visitors per month, work on this application was high pressure, and it's where I first worked in front-end development. The application itself was built using a combination of Backbone and jQuery, and had strict requirements for performance and user experience.

Early work on this project involved improving accessibility support. This involved learning the WCAG 2.0 standard and how to meet it, how to use and test various software for supporting impaired users, and learning a mental framework for how to approach accessibility early and effectively.

Completely overhauled the build system for the application to scale better with growing use. As our client base grew, the build system needed to handle an order of magnitude more messages. I was able to completely retool the build system to use an solution. This solution took the form of a docker image running in an autoscaling group in EC2 that processed messages coming from SQS and SNS, and started new instances based on the size of the queue. Once this overhaul was done, the build system could handle any number of builds in under 10 minutes.

Managed client satisfaction for all display applications. Developed new company processes to quickly triage tickets and route them to the appropriate teams. Later developed runbooks for the most common reoccurring issues, and trained support teams to use the runbooks to solve these issues immediately, avoiding the need to wait for developers to respond. This gave me plenty of practice debugging client code on live sites, taught me many ways to approach identifying and solving errors, and also helped me develop soft skills such as communicating with clients and support staff.

Trained and lead international team of engineers to take over several applications, including the front-end application mentioned above. This involved helping them get familiar with the application, teaching them the various processes we had developed to keep the application running smoothly, and slowly transitioning myself out.

Skills

Languages English (Native Speaker) Japanese (JLPT N2 - Business-level proficiency)

Programming Languages Javascript Typescript C++ C# Python Java

Front End Next.js React.js Create React App Redux Webpack Node Express Hapi Jest
Vite

Testing Jest Vitest Mocha AVA Node Tap

Back End SpringBoot Django Knex.js Sequelize MySQL PostgreSQL

AWS SQS SNS SES EC2 ECS EKS RDS Lambda API Gateway CloudFront
Route 53 VPC S3 DynamoDB ElastiCache AWS Auto Scaling CloudFormation
CloudWatch Certificate Manager KMS Secrets Manager

Pipeline Jenkins CircleCI Github Actions OpenShift TravisCI

Assorted Serverless Docker SonarQube Terraform Kubernetes

Education

University of Texas

Bachelor of Science in Computer Science 2008-2013 Austin, USA