

Jay Jayabose

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Profile

I'm a software engineer with multiple years of experience in JavaScript and Ruby and proficiency in TypeScript, Go, and various frameworks. Drawing on my business-side experience in early-stage ad-tech companies, I contribute commercial perspective and experience collaborating across functions and with customers.

Experience

Software Engineer, Arbiter (<https://arbiter-framework.com>) 2023 – present | Remote
Arbiter is an open-source, framework that seamlessly integrates room-based video conferencing into web applications and automates deployment to AWS

- Designed, prototyped, and built a video conferencing server (Selective Forwarding Unit) that distributes media streams, and manages call state for 15+ participants in a single room
- Developed a signaling server that enables negotiation of WebRTC connections and synchronizes call state among participants (WebSocket API Gateway, Lambdas, DynamoDB)
- Wrote a RESTful API to manage backend interactions between the frontend application and AWS infrastructure that provisions new ECS container instances to meet user demand (React, HTTP API Gateway, Lambdas)
- Containerized server components and designed a scaling mechanism that reduces complexity of server deployment by 10+ steps and enables API-based scaling (Docker, ECS, Fargate)
- Worked on CLI tool that automates the provisioning of AWS cloud infrastructure (ECS Clusters, WebSocket Gateway, HTTP API Gateway, IAM roles, etc.), reducing a 50+ step workflow to a single command
- Decoupled services based on traffic patterns and resolved race and concurrency challenges associated with event-driven architecture
- Implemented a pair-programming framework for a remote team of 3 engineers to foster mentorship and collaboration, resulting in increased team-wide ownership of code and clarity on technical decisions
- Authored a comprehensive technical case study providing analysis of Arbiter's problem domain, system design, and engineering decisions (arbiter-framework.com/case-study 📄)

Software Engineer, Self-Employed 2022 – 2023 | Remote
Selected Projects

- DreamCatcher: Tool for debugging webhooks, built with Node.js, Express, MongoDB, Digital Ocean Droplet, Nginx
- Shoply: E-commerce shopping cart, built with React, Node.js, Express, RESTful API, MongoDB
- Donzo: task management application, built with Ruby, Sinatra, ERB, RESTful API, PostgreSQL

General Manager, Pursuit 📄 2021 – 2022 | New York, NY
• Led a 40-person team operating the Pursuit Fellowship, which transforms the lives of New Yorkers with the most need and potential by training them to code and build careers in tech.

Customer Success Team Leader, Multiple Ad-Tech Startups 2005 – 2020 | New York, NY
I worked at the Manager, Director, and, Vice-President levels in three tech companies operating platforms related to e-commerce, predictive analytics, and performance media: Acxiom 📄, Proclivity 📄, and <Intent> 📄

- Key contributor to company strategy, quarterly OKRs, and M&A and capital raise processes
- Led a team of 15 in NY and London that managed 200+ advertiser accounts and over \$100MM revenue
- Partnered with the product team to develop novel media products for Expedia, Inc.
- Worked with product and engineering to pivot a 20-person company to a display advertising business

Skills

Languages & Frameworks

JavaScript, Ruby, TypeScript, Go, SQL, HTML/CSS, Node, Express, Sinatra, React, JQuery, Handlebars

Cloud

AWS EC2, ECS, Fargate, DynamoDB, Lambda, HTTP/WebSocket API Gateways, Cloudformation, IAM; Heroku, Digital Ocean Droplet

Other Technologies & Tools

Git/Github, MongoDB, PostgreSQL, Docker, Nginx, PM2, REST APIs, HTTP, WebSockets, Linux, Bash, Postman

Education

M.B.A., Georgetown University

Washington, DC,

B.A., Political Science & Economics, Tufts University

Medford, MA