Sam Schirmer

Full stack developer, cloud engineer, and solutions architect with 10+ years of experience. Specialized in AWS infrastructure, microservices architecture, and email systems. Focused on designing and implementing scalable solutions.

EXPERIENCE

Marketing By Numbers, St. Louis — Consultant

2022 - PRESENT

Writing Python, SQL, and Javascript, application architecture, maintaining AWS assets, optimizing infrastructure.

Polaris Software, St. Louis — Sr. Cloud Systems Engineer

2020 - PRESENT

Working with distributed teams to architect, build, deploy, and maintain cloud systems at AWS and GCP. Devising innovative solutions to solve critical business problems, developing proofs of concept, and working alongside engineers to streamline development processes. Build and maintain email servers and monitor sender reputation.

Hatchbuck (Polaris), St. Louis — Software Engineer

2017 - 2020

Contributed C#, Angular, jQuery, and SQL code to our flagship SaaS application. Collaborated with a distributed team.

Hatchbuck (Polaris), St. Louis — Sr. Technical Analyst

2014 - 2017

Designed and implemented web connectors with SaaS vendors, built a custom reporting system, developed ETL processes for customer data ingestion, served as an escalation point for the support team.

Miken Technologies, St. Louis — Desktop Support

2013 - 2014

Performed desktop and server administration, remotely diagnosed software problems and repaired hardware on the workbench, managed Active Directory and MS Exchange.

Scottrade, St. Louis — Sr. Technical Support

2010 - 2013

Provided technical assistance to clients and branch offices, trained new hires and developed documentation, served as liaison between developers and the technical support team, engaged in off-site UAT testing.

SKILLS

Languages: Go, Python, Ruby/Rails, Node.js/Express, Angular, Vue.js, C#, SQL, AWS CDK (TS), BASH, HTML/CSS

Email: Reputation monitoring, DNS configs (SPF/DKIM/DMARC/PTR), best practices, Halon MTA, PowerMTA, Postfix, AWS SES

Databases: Postgres, MySQL, MS SQL Server, SQLite, Redis, DynamoDB, Elasticsearch

Systems/Servers: DNS, AWS, GCP, Linux, MacOS, Windows

Cloud: IAM, Cognito, Lambda, EC2, RDS, ECS, S3, SQS, SES, Route53, Athena, Redshift, Cloudfront, VPN, Quicksight

Misc: Jira, Trello, New Relic, Github, Azure Devops, NGINX, Apache, IIS, Caddy, Postman, CDNetworks, DNSMadeEasy, OpenVPN, Darktrace, GSuite Admin, microservice architecture, ARIN, Slack, Office

PROJECTS

Bleacherbook — *SaaS Startup (defunct)*

Served as CTO for a tech startup that was a finalist in Arch Grants 2023. Designed infrastructure, application, and messaging protocols for virtual sports betting simulation. Coded and deployed API using Go, AWS Ec2, and Redis. Coded Angular SPA and deployed via Netlify. Built web connectors with sportsbook APIs and architected caching strategy.

HalonMTA — Email Server Setup and Configuration

Led the project and became the point person in the company for Halon initiatives. Configured the cloud infrastructure (EC2, ElastiCache, OpenSearch/Kibana, S3, networking and security groups), and worked closely with the lead developer to spec and troubleshoot his ASP.NET application (to feed the MTA from our existing queuing infrastructures). Wrote BASH scripts to assist with reporting and maintenance.

Hatchbuck Admin Portal — Internal Tooling and Visibility

Built an admin portal in C#/ASP.NET, Angular, and MS SQL Server that provides a way for technical support, sales, and account reps to access relevant information about client accounts, and securely log into them. This was a solo project, and it is still used company-wide.

Hatchbuck Reports— Custom Reporting Engine

Another solo project utilizing Ruby, SQL, and WickedPDF to generate custom reports for both client and internal use. This allowed us to cover up a weakness in the application (few/insufficient reports) and diversify revenue by selling the service directly to clients or offering custom reports as an upsell incentive. The engine is also leveraged internally to send out commission and revenue sharing reports to sales, churn data to our customer success manager, and revenue figures to leadership.

Hatchbuck K-12 ETL — FTP Ingestion Microservice

Wrote a C# service that accepts new user credentials, asymmetrically encrypts the payload, and queues it in AWS SQS for asynchronous processing. Then deployed and hardened an SFTP server on EC2 that uses BASH to poll SQS, decrypt the credentials, and create the new SFTP user. A second BASH script watches for uploaded client files and syncs them with S3 for later processing by the main application.

Heavy Riff Brewing Website — Website for Local Business

Worked with UI designer to create a marketing page using Go, SQLite, Vue.js, Bulma, and the Untappd API. https://heavyriffbrewing.com