

BROOKE MOSBY

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Professional Summary

Top performing full-stack senior software engineer with 10+ years of experience developing frontend, backend, dev-ops, payment systems, web 3.0 technologies and ML/AI R&D, for bullet-proof and agile applications. Excellent interpersonal skills, and able to clearly communicate, commit to, and exceed expectations. Skilled in designing and implementing robust architecture for many high profile features using a wide range of programming languages and tools. At Vercel, led delivery of AI agent tooling (Vercel MCP, Agent Runs), deployment infrastructure (Rolling Releases, 45% P99 routing improvement), and 16 customer-facing platform releases. Always eager to dive into new challenges and to gain a new skillset.

Technologies Used

Languages

Golang, Javascript (NodeJS, NextJs, & React), Typescript, Python, Ruby on Rails, C++, Dart, Git, Bash, Lua, HTML, CSS, Mustache, Handlebars, MATLAB, R, Jsonnet

AI & Agent Tooling

Model Context Protocol (MCP), AI agent integrations (Cursor, ChatGPT, Claude, Devin, Windsurf), OAuth-based agent authorization, Agent Runs / observability

Web Hosting, Deployment, CI/CD pipelines

AWS, Azure, GCP, Vercel, Docker, Kubernetes, Terraform, Jenkins, Travis, GitOps, Github Actions, Vercel

Databases

SQL, DBT, Snowflake, Postgres, MongoDB, DynamoDB, MySQL, Redis, GraphQL, Cosmos

Monitoring

Datadog, Splunk, Pagerduty, Prometheus, Grafana, PromQL

Work History

Tech Lead & Staff Infrastructure Engineer, Vercel

07/2022 – Current

- Launched Vercel MCP, the official Model Context Protocol server enabling AI agents (Cursor, ChatGPT, Claude, Devin, Windsurf, Raycast, Goose) to search docs, manage deployments, analyze build logs, and access protected deployments via OAuth.
- Shipped Agent Runs in Vercel MCP and CLI (vercel agent-runs), giving agents visibility into agent sessions including reasoning traces, tool calls, and token usage.
- Contributed to Vercel Python SDK, enabling sandbox execution, Blob storage, and Runtime Cache API from Python applications.
- Added CLI developer experience improvements including vercel open (dashboard from terminal) and MCP/CLI tooling for agent-driven workflows.
- Upgraded Managed Infrastructure, delivering up to 45% faster routing at P99 and reliability improvements across all plans through optimized deployment metadata retrieval.
- Built and shipped Rolling Releases GA, incremental deployment rollouts with real-time error rate and Speed Insights comparison, sub-300ms global propagation, and REST API/CLI/Terraform controls.
- Implemented Skew Protection for prebuilt deployments, enabling version consistency for local build + vercel deploy --prebuilt workflows via custom deploymentId in Next.js.
- Designed and launched deployment retention policies, configurable retention periods via dashboard and CLI, with instant restore for deleted deployments within 30 days.
- Shipped environment variable Config vs Secret types, replacing the Sensitive toggle with explicit visibility controls and team-level production secret separation policies.

- Enabled self-serve custom environment purchasing for Pro/Enterprise teams (API, CLI, and dashboard), supporting staging/QA workflows with per-environment branch tracking and domains.
- Contributed to WAF persistent actions (1-60 minute blocks for repeat offenders) and OPTIONS Allowlist for CORS preflight path restrictions.
- Managed team by planning, delegating work, & mentoring employees.
- Designed & implemented multiple microservices to replace outdated monolith codebase.
- Implemented service to reduce P99 of TTFB for data fetches by over 50%.

Senior Software Engineer, GoPuff

08/2021 – 03/2022

- Developed new driver payment microservice in Golang & frontend in JavaScript React to replace outdated SQL/DBT based payment system.
- Corrected calculations & analyzed over 40,000 daily orders to ensure payment history was accurately maintained.
- Set up dashboard & alerts in Datadog to monitor production environment.

Senior Software Engineer, Apple

05/2018 – 08/2021

- Decreased feature release time with code generators to automate tedious development in various languages.
- Implemented end to end features requiring integration into complex monolith legacy codebase.
- Deployed EC2 solutions, updated DynamoDB, and integrated with Angular JS frontend.
- Created dashboards on Splunk to monitor operational health metrics and notify on-call DevOps of any issues.
- Collaborated with team to design and implement architecture for multitenant microservice.
- Recipient of Excellence Award.

Data Engineer Intern, Medic.Life

02/2017 – 08/2017

- Developed ML algorithms to determine frequency, HNR, glottal pulses and jitter of signal, with accuracy up to 99%.
- Authored python package index to deploy and integrate with code painlessly.

Research Assistant, Brigham Young University

10/2016 – 03/2017

- Researched and implemented simulations under two professors for celestial body research & robotics research.
- Modeled motion of celestial bodies within two body system, by applying Newton's and Kepler's laws and Fourier transforms.
- Used Matlab to model different robotics movements and track algorithm speed.

Education

Bachelor of Science: Applied & Computational Mathematics, Brigham Young University

12/2017

Received full ride academic scholarship to attend. Invited to and participated in Phi Eta Sigma, BYU Honor Society, Graduated with a GPA of 3.7. Earned an emphasis in Mathematical Theory & Statistics.

Provo, UT