



WILLIAM MCADAMS


SENIOR PLATFORM ENGINEER

CONTACT

 (803)386-0750

 musicpulpite@proton.me

 github.com/musicpulpite

 Brooklyn, NY

TECHNOLOGIES

Frontend

React/Redux, Angular, Webpack/Rollup, Typescript/Javascript, Next.js

Backend

Node.js, Python, FastAPI, GraphQL, Golang, Golang gRPC, Thrift, Rust, Java

Databases/Messaging

Aurora PostgreSQL, MySQL, MongoDB, Redis, Kafka, BullMQ, AWS DynamoDB

Devops/Infrastructure

AWS, GCP (Google Cloud), Terraform Cloud, Datadog, CircleCI, HAProxy/nginx/pgbouncer, cloud networking (vpc/routing/firewalls), Docker, Kubernetes (EKS), ECS, AWS Lambda, OTL tracing, Linux admin in EC2, bazel build system

EDUCATION

O.M.S. Computer Science

Georgia Institute of Technology

2020-2022 (partial)

Coursework: Graduate Operating Systems, Reinforcement Learning, Networking Fundamentals

B.S. Chemistry, Computer Science

Vanderbilt University

PROFILE

I am a platform engineer with experience in both building cloud native infrastructure and configuring DevOps workflows. I've architected every layer of the cloud native stack from network to gRPC/database proxies to databases and caches and applications both persistent and ephemeral. I also build developer tooling and deployment workflows to speed up the iteration loop.

Before promotion to platform engineering, I spent almost five years doing full stack engineering in a variety of technologies where I built web features from database to frontend. This past experience has given me valuable insight into what infrastructures and workflows make the development process quicker and easier.

WORK EXPERIENCE

Senior Platform Engineer

Charlie Health (www.charliehealth.com/)

September 2023-Present

- Built a custom Golang CLI tool using [koanf](#) to dynamically fetch configuration in our applications. Wrote a custom Github Action for generating release notes and implemented caching in crucial GH Workflows that build application images and executables. Deployed a [bazel remote cache](#) using AWS ECS for that purpose.
- Deployed a database connection pooler using [pgbouncer](#) to limit the memory needs on our main AWS RDS databases. In the process of migrating from said managed RDS instances to a native AWS Aurora cluster with RDS Proxy.
- Maintained terragrunt/terraform for entire network architecture and custom compute tasks, designed prototype terraform modules for our upcoming migration to AWS ECS from a PaaS provider.

Senior Full Stack Software Engineer

Thrive Fantasy (www.thrivefantasy.com)

April 2023-September 2023

- Implemented a variety of Developer Workflow optimizations, such as: auto Docker ECR image publish and auto ECS service redeploy using Github Actions, auto-publish Typescript types package and documentation website, a standard workflow for validating http request bodies (Node/Express), built a client package to be consumed by third-party contractor frontend teams.
- Refactored large parts of a legacy Java application to run on Node.js and MySQL with proxy requests to the original backend and compute-intensive tasks either directed to Node serverless endpoints or using BullMQ worker tasks.
- Rearchitected this entire tech stack migration in AWS using Terraform Cloud as an Infrastructure-as-Code solution and to ensure consistency.

Full Stack Software Engineer

Compass Realty (www.compass.com)

February 2021-March 2023

- **Network Automation Team** (Tech Infra) - Member of a core infrastructure team managing the entire networking/DNS/internal proxy layer for the organization, maintaining our automated scripting tools, providing on-call support platform-wide.
- Implemented autoscaling across the fleet of HaProxy internal proxies to handle influxes of traffic.
- **Media Library Team** - Built two new user interfaces (React package and web app) and built a Go microservice to surface and integrate file assets from across the Compass platform in one place, handled throughput of ~50,000 uploads / day.