Matthew Kuntz

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-- Work Experience --

2021-Present: Automox

Staff SRE -
Our team is building a fully self service developer platform. Worked heavily on multiple aspects of Infrastructure provisioning, GitOps, CICD lifecycle. Primary on-call responsibilities for Postgres and RabbitMQ. Work heavily with application teams on observability and alerting projects in DataDog and Prometheus/AlertManager. Worked inside a central SRE team and in an embedded model inside application developer teams.

2020-2021: Angie's List

Devops / Platform Engineer -
Lead the build-out of a brand new platform as part of a small team with an MVP in 3 months. Golang/gRPC with MySQL and DynamoDB for persistence. Used GraphQL micro-frontends (BFF pattern). Built Gitlab CI/CD on AWS EKS and Lambda, using Blue/Green deployments. Instrumented logging and distributed tracing using DataDog; all logged errors have correlated traces, and traces generate metrics used for alerting rules. Tightly integrated User Analytics with Application Data in Snowflake for BI reporting. Promoted to **Architect** in 2021.

2017-Present: Sutlr

Co-founder -
Small application startup, now in mobile app stores. React Native front end with GraphQL based Elixir backend on Postgres. Using Sentry for error reporting and OpenTelemetry for tracing and app performance metrics. Digital Ocean K8s for deployments, BigQuery / Cloud Functions for miscellaneous tasks. Lots of Redis usage for caching and job work queues.

2015-2020: mHelpDesk

Backend Software Engineer. .NET 4.5, netcore, SQL Server 2012.
Test Driven Development with netcore Rest API using LightInject, Moq and Dapper.
Gitlab + Jenkins + Octopus continuous integration. Logging ELK pipeline
Leading the effort to break up a monolithic webforms application into microservices (Kafka, Docker, etc). Advocate for git-flow and code reviews. Monitoring Application and Server health with AppDynamics and DataDog. Acquired by Angi Home Services in 2020.

2013-2015: Aquas Inc.

Intern and Jr. Developer. C# .NET 4.5, ASP Web Forms , SQL Server 2008. Minor VB.NET
Setting up source control (git), improving workflow process (git-flow, JIRA), and working towards a continuous integration server (Bamboo or Jenkins)

-- Technical Experience –

- **Javascript / Typescript / Node.js** [8 years]
  - React/Angular
  - Scripting frameworks (including CDK, Github Actions and other shell scripts)
  - Express, Koa and Nest web tiers
- **.NET** [5 years]
- **Golang** [4 years]
  - Gin / gRPC web layers.
  - Viper/Cobra application frameworks.
  - Gorm with MySQL and DynamoDB

- ○ Lambda functions
- ○ Scripting Framework
- **Database** [8 years]
  - ○ MSSQL, MySQL and Postgres. Snowflake and BigQuery
  - ○ Document Databases (Elasticsearch, Firestore, DynamoDb)
  - ○ Redis
  - ○ RabbitMQ and Kafka
- **Devops** [6 years]
  - ○ Immutable Infrastructure - Saltstack, Packer and Terraform/Terragrunt
  - ○ Docker and Kubernetes
  - ○ AWS (primary) and Google Cloud Platform experience
  - ○ Jenkins, Gitlab CI/CD, Github Actions
  - ○ DataDog and OpenTelemetry Observability
- **Elixir** [4 years]
  - ○ Phoenix/Absinthe and Ecto ORM
  - ○ Exq and GenServer background jobs

-- Recent Projects --

- Contributed to a fully self service developer platform that is powered by Terraform/Terragrunt where developers only have to edit Yaml files to self-provision any cloud resources. Runs fully in GitOps CICD with Atlantis. On track to eventually open-sourced to the community
- On-call primary point-of-escalation for production Postgres and RabbitMQ issues. Also support Kubernetes and application specific issues.
- Did a live swap of a production cluster CNI during an incident from Weave to Calico after weave repeatedly failed to reach a quorum of nodes needed to restart cluster networking.
- Typescript based build/deployment scripts for building and deploying Docker containers to Kubernetes using Helm. Orchestrated by Gitlab CI/CD. Blue/Green aware deployments with manual gates for deploy/swap/rollback/finalize.
- Security scans using Clair container scanning and Gosec/ShiftLeft application scans. Configured WAF rules and familiar with OWASP best practices. Participated in security events, both simulations and actual incidents
- Feature Flag system extending Unleash with extra audience targeting abilities and automation
- Istio service mesh for gRPC load balancing in Kubernetes.
- Started a project to use Flagger to observe application metrics for automatic canary deploys and rollbacks
- AWS Step Functions with Golang Lambdas to rebuild Elasticsearch indices.
- DataDog fully integrated applications (Go/Node) - Logs have TraceID correlations, Traces have tagged spans for filtering and analytics. Alerts and Dashboards scripted out with Terraform
- Generated custom database metrics from a legacy MSSQL Database using a Go service and published to DataDog.
- OpenTelemetry traces and Prometheus metrics for Elixir applications. Tried using the OpenTelemetry collector to generate metrics from traces.
- Data Pipelines using AWS DMS to move Dynamo and MySQL data to S3, where it is ingested into Snowflake. That data is then correlated with Analytics data from Segment. Investigating Snowplow as an alternative solution for more control
- Adding Observability to dotnet microservices using RabbitMQ and Saga patterns.
- Elixir GraphQL umbrella application with Postgres / PostGIS, Elasticsearch and Redis. Uses GenServer/actor pattern and background job patterns (similar to Sidekiq). Correlate analytics data (Firebase -> BigQuery) with Application Data with nightly jobs