Aryan Mike Binazir

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Profile

Software Engineer with experience in technologies such as Go, JavaScript, and AWS. Led development of core components for Triage, an open-source Kafka proxy addressing head-of-line blocking issues. U.S. Citizen.

Skills

Languages (Go Programming Language, JavaScript/Node.js, TypeScript, Ruby, Bash Scripting) | **React.js**

Cloud (AWS EC2, AWS ECR, AWS Fargate, AWS CDK, AWS S3, AWS DynamoDB, Digital Ocean Droplet, Heroku)

Databases (SQL, NoSQL, PostgreSQL, MySQL, MongoDB, Redis) | **REST APIs** | **Docker** | **Express.js**

Testing (Unit Tests, Integration Tests, Regression Tests) | **Agile Methodologies** | **Systems Design** | **Linux**

Microservices (Event-Driven Architectures, Message Queues, Apache Kafka) | **HTML/CSS** | **Git/Github** | **CI/CD**

Infrastructure as Code (Terraform, CDK, CloudFormation) | **HTTP** | **Serverless** | **gRPC** | **Ngrok** | **Nginx**

Experience

Co-Creator, Software Engineer (team-triage.github.io), *Triage* 2022 – present

Triage is an open-source proxy for Apache Kafka that addresses head-of-line blocking from poison pill messages and non-uniform consumer latency. It enhances parallel consumption, allowing for an at least tenfold increase in consumer connections per Kafka partition for downstream consumer instances.

- Designed and built Triage using Go, gRPC, Amazon Web Services (AWS) Fargate, and AWS Elastic Container Service (ECS)
- Led development of Triage core components, leveraging Go, including Go Channels & Goroutines to utilize concurrency, enabling parallel consumption of messages for Kafka consumers
- Leveraged Go and its concurrency features to halve the estimated development time compared to single-threaded languages
- Enabled multiple downstream consumer applications to connect to Triage by developing Triage thin client library in Go and a gRPC service, allowing for an at least 1000% increase in connections per Kafka partition
- Containerized Triage service with Docker, streamlining the process of deployment to an AWS ECS cluster
- Automated infrastructure deployment strategy using AWS Cloud Development Kit (CDK)/CloudFormation
- Built Node.js CLI tool, written in JavaScript and available as an npm package to simplify configuration, deployment, and teardown of Triage in the cloud
- Implemented application logic and design components allowing for the storage of poison pill messages in a dead-letter store using AWS DynamoDB
- Collaborated with a remote team of four engineers across two time zones
- Authored technical case study showcasing Triage, available at team-triage.github.io/case-study

Software Engineer, *Open-Source Projects* 2020 – 2022

- Request-Djinn - an HTTP webhook inspector built using Node.js, Express.js, React.js, MongoDB, PostgreSQL, Digital Ocean Droplet, Nginx, PM2 & Tailwind CSS
- Online Outlet - an e-commerce application created using Node.js, Express.js, React.js, REST APIs
- Address Buddy - a contact management application developed with Node.js, Express.js & PostgreSQL
- BookWorm - a book-viewing application built using Ruby, Sinatra, PostgreSQL, JavaScript & ERB

Start-Up Experience & Real Estate Investments 2011 – 2020

- Performed investment due diligence supporting opportunities for a start-up private merchant bank connecting investors with energy and other asset opportunities in emerging markets in Africa
- Built a real estate portfolio with properties in both the United States and South Africa

Education

M.B.A, *University of Pretoria/Gordon Institute of Business Science* 2012

B.S. in Computer Science, *University of the Witwatersrand* 2009