Aryan Mike Binazir

abinazir@gmail.com | Raleigh-Durham-Chapel Hill, NC | LinkedIn | Github | aryanbinazir.dev

Experience

Senior Software Engineer, *Fortress Information Security* 🔗   May 2025 – present
- Spearheaded technology ideation, architecture, and MVP development for a comprehensive backend rewrite, effectively securing developer buy-in while championing strong type safety and robust type systems. Leveraged asynchronous queuing to offload long-running processes, ensuring a more responsive frontend.
- Researched, engineered, and implemented advanced monitoring, telemetry, and APM solutions by leveraging OpenTel as a foundational framework following a comprehensive evaluation to identify the optimal toolset. Developed custom adapters to intercept and modify existing methods for compatibility when native integration was not feasible, and cultivated strategic relationships to drive company-wide adoption.

Software Engineer, *Fortress Information Security* 🔗   Oct 2023 – Apr 2025
- Transformed an alpha-stage full-stack application into a production-ready system by optimizing Node.js backend performance, improving horizontal scalability and memory management, enhancing security in preparation for penetration testing, and implementing new features in both Node.js and React.js
- Optimized MongoDB performance and ensured data consistency by implementing advanced aggregations and refining indexing strategies in a critical app, including adding indexes to both the app and APM databases

Co-Creator, Software Engineer, *Triage* 🔗   Aug 2022 – Sep 2023
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.
- Designed & 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.
- 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.
- Authored technical case study showcasing Triage, available at team-triage.github.io/case-study 🔗 .

Software Engineer, *Open-Source Projects*   Aug 2020 – Jul 2022
- Developed and deployed multiple full-stack web applications—including an HTTP webhook inspector, a text-sharing platform, an e-commerce site, and a book-viewing application—using technologies such as Python, JavaScript/Node, Express, React, MongoDB, PostgreSQL, Go, MySQL, Ruby, AWS, and Nginx.

Start-Up Experience & Real Estate Investments   Jan 2011 – Jul 2020
- Performed investment due diligence for an African start-up merchant bank and built a real estate portfolio.

Skills

Go | **JavaScript/TypeScript** | **Python** | **Node.js** | **React.js** | **Cloud** — AWS EC2, AWS ECR, AWS Fargate, AWS CDK, AWS S3, AWS DynamoDB | **Databases** — SQL, NoSQL, PostgreSQL, MySQL, MongoDB, Redis |

Mongo Aggregations | **REST APIs** | **Docker** | **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 | **gRPC** | **Serverless** | **Nginx** | **Bash**

Education

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

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