Kareem Maize *Software Engineer*

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602 854 8779

Latrobe, PA

Portfolio

Profile

I'm a software engineer who identifies business pain points and creates technical solutions that drive measurable growth, revenue, and customer retention.

Skills

Backend Engineering ●●●●●
Microservices, Monolithic, gRPC, REST, Kafka, RabbitMQ, Event-Driven Architecture, Real-Time

Databases ●●●●●
MySQL, PostgreSQL, MongoDB, Cassandra

Cloud & DevOps ●●●●○
Terraform, Docker, Kubernetes, Github actions/Jenkins, Prometheus, AWS(S3, DynamoDB, IAM, ECS, ECR, EC2, EKS, Lambda etc), GCP(Firebase, Cloud)
Azure (Functions, AKS, App Services)

Frontend Technologies ●●●●○
React, Next, Angular, Vue

Frameworks ●●●●●
Python (Django, Flask, FastAPI)
Java (SpringBoot, Spring)
Go (gin-gonic, gorilla-mux, go-chi, martini)
C/C++, C# (.NET)
Ruby (Ruby on Rails)
PHP (Laravel, Symphony, CodeIgniter, Drupal)
Typescript, Javascript (Node.js, Express.js, Nest.js)
Rust (Actix, Rocket, Axum)

Education

09/2006 – 05/2012
Philadelphia, PA

Bachelor's Degree, Computer Science
University of Pennsylvania

Professional Experience

10/2024 – Present
Remote

Senior Software Engineer
Apple
Contributed to the backend of **Apple's** internal **ML Hub**, a shared platform that allows teams to store datasets, track experiments, version models, and deploy them at scale.

- Built and maintained core **Go microservices** (Workflow, Model Repository, Experiment Tracking, etc.) to standardize ML workflows across teams.
- Designed **GraphQL APIs** for ease of use, with **gRPC** for service-to-service communication, enabling seamless access to models and datasets.
- Orchestrated large-scale ML workflows with **Temporal.io** for retries and **Argo Workflows** on **Kubernetes** to manage training/evaluation pipelines.
- Managed **versioned models** and **datasets** in **PostgreSQL**, stored artifacts in **S3**, and used **Kafka** for real-time event streaming across tools.
- Integrated **Apple Directory** for **RBAC** and approval workflows to ensure secure, compliant access to models and data.
- Tracked model deployments with **Deploy Track** (using **Temporal** and **Kafka**) for version control and health reporting.
- Deployed infrastructure using **Pulumi** (**Python**) and **Docker**, automating multi-env rollouts and CI/CD pipelines in **Amazon EKS**.

- Implemented **observability** with **Datadog** and **Prometheus/Grafana**, tracking logs and live job status via **GraphQL subscriptions**.

Outcome: *Streamlined ML workflows, cutting duplicate effort, speeding AI feature development, and ensuring security and monitoring consistency across Apple teams.*

11/2017 – 09/2024
Philadelphia, PA

Senior Software Engineer
Capital One
*Enhanced real-time **credit card authorization** and **fraud detection** systems, ensuring fast, secure transactions with a focus on reliability and security.*

- Built and maintained **Java (Spring Boot)** services on **AWS** that process card authorizations in real time; tuned connection pools, caching, and SQL to keep p99 latency low.
- Stored hot state in **Redis** and **Amazon RDS (PostgreSQL)**; streamed transaction events with **Kafka** (and **SQS** for simpler queues) to feed fraud checks and reporting.
- Reduced PCI scope by adding **tokenization** and **OAuth2/JWT**; protected keys with **AWS KMS**; monitored security and performance with **CloudWatch** and **Datadog**.
- Added a **Python (FastAPI)** service that computes fraud features like velocity and device signals; cached results in Redis to avoid repeated work during spikes.
- Protected the system with **rate limits**, basic **circuit breakers**, and **timeouts**; ran **k6** and **Gatling** performance tests and small chaos drills to verify failover.
- Published partner **REST** APIs behind **API Gateway** with **idempotency keys**, clear error codes, and plan-based throttling so integrators can retry safely.
- Automated builds and deploys with **GitHub Actions** and **Jenkins**; database migrations with **Flyway**; infra as code with **Terraform**; used rolling and small canary releases.

Outcome: *lower authorization latency, fewer false fraud blocks, and cleaner compliance posture.*

06/2012 – 10/2017
Canonsburg, PA

Full Stack Developer
Ansys
*Developed a **B2B E-commerce platform** that enables customers to quickly purchase **Ansys software**, add **cloud credits**, and activate **licenses**, streamlining the buying process.*

- Built a multi-tenant store and subscription system for Ansys software licenses and cloud credits using **Node.js, Ruby** and **other frameworks** with **REST** and **GraphQL** APIs.
- Modeled orders, subscriptions, usage, and entitlements in **PostgreSQL**; used **Redis** for carts, sessions, and rate limits; added fast catalog search with **OpenSearch/Elasticsearch**.
- Connected **Stripe/Adyen** and **Avalara**; handled **webhooks** with retries and **idempotency** so purchases and renewals always finished cleanly.
- Wrote a provisioning service that, after payment, **activates licenses and credit packs** via internal licensing APIs; added **SSO (OIDC/SAML)** and **RBAC** so company admins can assign seats safely.
- Used **Kafka** (and **RabbitMQ** where simpler) for background jobs like invoices, credit top-ups, and email notifications; exposed a simple status API for support and ops.
- Shipped with **Docker** on **Azure AKS**; infra managed with **Terraform**; CI/CD in **GitHub Actions**; secrets in **Azure Key Vault**.
- Added **OpenTelemetry** tracing, **Prometheus/Grafana** dashboards, **Datadog** alerts, and **k6** load tests for sale days and launches.

Outcome: *faster checkout, license activation in minutes, and clear revenue and usage reports for finance and customer success.*