

YOHANNES MERGA

Backend Engineer / Python & Go / Payments, Data Pipelines, AWS Infrastructure

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Summary

Backend engineer with 4 years shipping production systems in payments, real-money gaming and HR-tech. Python for services (FastAPI, Django, Kafka and Celery workers) and Go for infrastructure tooling: a Terraform provisioning CLI, a MySQL-to-ClickHouse cold-data pipeline and an open-source AWS Encryption SDK wrapper. Also fluent in TypeScript/Node. No sponsorship needed for remote roles. Open to relocation with visa sponsorship.

Experience

Software Engineer (Backend)

Real Gaming · via Mereb Technologies

Jul 2025 – Present

Remote (Las Vegas, USA)

- Self-hosted HashiCorp Vault for config and credential auto-rotation; wrote an open-source Go wrapper (github.com/johnmerga/custom-aws-encryption-sdk) adding a Vault master-key provider to the AWS Encryption SDK to encrypt KYC, PII and payment tokens.
- Wrote a Go CLI wrapping Terraform that provisions and tears down the complete realgaming-poker environment on AWS with one command.
- Building a Go CLI that migrates cold MySQL data from the poker core into ClickHouse schemas so reporting runs on a columnar store instead of the transactional DB (in progress).
- Eliminated recurring outages from PostgreSQL pool exhaustion (nested transactions holding connections): reused one connection per request, 4s query timeout, pool 20 to 50. 15 errors in 8 months, zero in the last 3.
- Integrated Braintree (primary), Stripe (fallback), Hyperwallet (payouts) and Plaid: idempotent charges, webhooks, retries, reconciliation, refunds/chargebacks for ~1,000 transactions/day (~\$100k/month) under KYC/AML.
- Replaced Datadog (1 service, <6h retention) with self-hosted ClickHouse + HyperDX covering 20+ services (9 DBs, 4 game servers, Redis, APIs) with Slack alerts and dashboards.

Lead Software Engineer

Mereb Technologies

Nov 2024 – Jun 2025

Addis Ababa, Ethiopia

- Led 4 engineers and architected an AI-assisted ATS on Python/FastAPI microservices (plus Express, Next.js) used by 100+ recruiters, 20+ companies and 5,000+ candidates: live coding challenges, cheating detection, AI scoring and pre-interviews.
- Built on-demand isolated coding sandboxes on Docker Swarm with prebuilt per-challenge images; spin-up 4 min to 30 s, ~10 concurrent on one 64GB host.
- Built a Python GPT-4 CV-extraction pipeline (~250 CVs/day) with retries and a manual-review queue; ~90% field accuracy against recruiter review.

Backend Developer (contract)

PRO-BIT programska oprema d.o.o.

Jul 2024 – Oct 2024

Remote (Slovenia)

- Built the platform service registry for a multi-tenant, Kafka-based FastAPI microservice ERP: registration, TTL heartbeats, health, capability/instance management and dependency validation so tenants can enable services such as inventory or CRM.

Backend Engineer

Sulala · via Mereb Technologies

Jan 2024 – Jun 2024

Remote (Kuwait)

- Built the Django/DRF backend for an early-stage animal marketplace (listings, veterinarians, pet groceries) with Celery workers for notifications, email, uploads and heavy queries.

Full-Stack Engineer

Siinqee Bank

Jun 2023 – Dec 2023

Addis Ababa, Ethiopia

- Built a Telegram bot and React dashboard for branch technical-issue tracking used by 500+ branch managers, giving head office visibility into previously untracked issues.

Junior Full-Stack Developer, EagleLion System Technology — React/TypeScript features, REST

APIs and BI dashboards for internal finance tools.

Oct 2022 – May 2023

Skills

Languages & Frontend: Python, Go, TypeScript/Node.js, SQL, React, Next.js, TanStack Query/Table, Zustand

Backend & Messaging: FastAPI, Express, Django/DRF, gRPC, REST API design, RabbitMQ, Kafka, Celery

Data: Redis, PostgreSQL, MySQL, ClickHouse, Typesense

Cloud & DevOps: AWS (ECS/Fargate, ECR, S3, CloudFront, KMS), GCP, Hetzner, Docker, Docker Swarm, Terraform, Ansible, GitHub Actions, Envoy / Nginx

Payments, Security & Observability: Braintree, Stripe, Hyperwallet, Plaid, HashiCorp Vault, HyperDX

AI & Testing: OpenAI API, LangChain, Pytest, Vitest

Education

Addis Ababa University — BSc Software Engineering

Oct 2017 – Jul 2022

ALX — Software Engineering Program (12-month, backend)

Jun 2021 – Jun 2022