Prince Ude Backend and Infrastructure Engineer

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Summary

Backend and Infrastructure Engineer specializing in Go and Kubernetes, with a focus on realtime backend systems and platform tooling. Shipped a multiplayer backend serving 600k+ users, telemetry infrastructure processing location updates from 3.5k+ concurrently online vehicles, and a Kubernetes operator running in production that automates application deployment through custom resources and automated reconciliation.

Skills

Core: Go (backend systems, concurrency, networking) | Kubernetes (controller-runtime, CRDs, operators, cluster operations)

Infrastructure & Ops: K8s, k3s, Helm, controller-runtime, CRDs, Docker, Linux, Docker Compose, GitHub Actions, Caddy, Traefik

Databases & Messaging: PostgreSQL, TimescaleDB, Redis, NATS

Networking: gorilla/websocket, gRPC, Protocol Buffers, TCP/WebSocket

Observability & Performance: OpenTelemetry, OTel Collector, Grafana Cloud, Pyroscope, pprof

Experience

Backend and Infrastructure Engineer, *WHOT Studios* 02/2024 – Present
Gaming technology company building multiplayer mobile experiences serving hundreds of thousands of players. Abuja, Nigeria

- Built multiplayer backend systems serving 600k+ players, implementing room state synchronization and WebSocket communication in Go.
- Built authoritative game rooms supporting 500 to 1000 concurrent players per node with p99 tick latency of approximately 42ms.
- Migrated production workloads from single server deployments to a self managed k3s cluster, enabling horizontal scaling and standardized deployment workflows.
- Built asynchronous backend workflows using NATS for gameplay events and internal service messaging.
- Implemented observability across backend services using OpenTelemetry, OTel Collector, Grafana Cloud, and runtime profiling.

Systems Reliability Engineer, *Gtrac Services Ltd* 08/2022 – 02/2024
Fleet management and GPS tracking company providing realtime telemetry and operational visibility solutions. Lagos, Nigeria

- Maintained telemetry ingestion infrastructure processing realtime location updates from 3.5k+ concurrently online vehicles.
- Built and maintained backend services supporting GPS tracking, telemetry ingestion, geofencing, alerts, and fleet reporting systems, with TimescaleDB and PostgreSQL ingestion pipelines for high volume time series workloads.
- Managed Linux based production systems running containerized backend services, Caddy reverse proxy infrastructure, and Docker networking; automated deployments using GitHub Actions and remote Linux rollout scripts.
- Implemented monitoring and observability using OpenTelemetry and Grafana Cloud.

Projects

AppDeployment Operator – Internal Kubernetes Deployment Platform
- Built a Kubernetes operator in Go using controller-runtime and a custom Deployment CRD, replacing manually defined Kubernetes resources with a single declarative custom resource.
- Running in production for 4+ months across multiple services, reconciling Deployments, StatefulSets, Services, Jobs, ConfigMaps, Ingresses, and Namespaces with drift detection, automated pruning, variable substitution, and rollout health checks.
- Integrated with External Secrets Operator (ESO), Vault, GitHub Actions, and GHCR for automated secret management, image publishing, and CI/CD.

Cash.io – Multiplayer Realtime Infrastructure
- Designed room lifecycle management, state replication, and snapshot synchronization mechanisms for authoritative multiplayer game servers in Go.
- Reduced bandwidth and allocation overhead via protobuf-based snapshot serialization; profiled goroutine pressure, websocket backlog buildup, and serialization hotspots with Pyroscope and pprof.

Routenex – Fleet Tracking SaaS
- Built GPS tracking and telemetry ingestion backend handling millions of writes into TimescaleDB/PostgreSQL and Redis-backed realtime systems.
- Designed and operated a self-hosted k3s platform with Helm, GitHub Actions, OpenTelemetry, and Grafana Cloud.