

Technical Skills

- **Backend & API:** Go (Chi), Python (FastAPI, Django), Kotlin, ASP.NET Core, RESTful API Design, WebSockets
- **DevOps & Infra:** Docker (Engine API, Files, Networking), Infrastructure as Code (IaC - SaltStack, Go CLI), Continuous Integration/Continuous Deployment (CI/CD - GitHub Actions), Cloudflare (R2, Pages), Linux Server Provisioning/Management, Nginx
- **Databases & Cache:** PostgreSQL (High Availability (HA), PgBouncer), MongoDB, Redis (DragonflyDB), SQLite
- **Monitoring:** Prometheus, Grafana, Loki, cAdvisor, Node Exporter, Uptime Kuma, OpenTelemetry (OTEL - conceptual)
- **Tools:** Git, Shell Scripting, S3-compatible Storage, Secrets Management (1Password CLI), HTTP Live Streaming (HLS)/FFMPEG, Plane.dev, Vagrant
- **Frontend (Supporting):** TypeScript, React, TailwindCSS, Zustand, TanStack Router/Query

Experience

Boynér Büyük Mağazacılık

Backend Engineer Intern - ASP.NET

June 2024 – Aug 2024

Istanbul, TR

– Contributed to backend development for large-scale e-commerce platform using ASP.NET Core during internship.

ElephantApps

Backend Engineer - Python / FastAPI

Mar 2023 – Jan 2024

Istanbul, TR

– Led backend development for real-time vehicle auction system using Python (FastAPI), MongoDB, Celery, RabbitMQ.

– Implemented and managed AWS CloudWatch/X-Ray/OTEL monitoring stack for application performance monitoring (APM).

VisitRise

Data Engineer (Contract) - Go

Feb 2023 – Mar 2023

Remote

– Developed Go-based data processing pipelines and utilities in a short-term contract role.

Projects

Oblivion - Personal DevOps Toolkit

[🐙 GitHub](#)

- Developed Go CLI (Cobra, Viper) for personal Infrastructure as Code (IaC) and declarative server provisioning.
- Provisions Docker services via TOML configuration (HA PostgreSQL, Nginx, Redis, Monitoring Stack).
- Automates Docker resource management (image pulling, network/volume creation) using Docker Engine API.
- Implements service health checks and dependency management during provisioning sequence.
- Integrates 1Password CLI for secure secrets injection during automated deployments and service configuration.
- Manages monitoring stack deployment (Prometheus, Grafana, Loki); includes ‘wal-g’ S3 backup helpers (Cloudflare R2).

Code Playground (code.cansu.dev)

[🐙 GitHub](#)

[🔗 Link](#)

- Built full-stack code execution platform (Go/Chi backend, React/TypeScript frontend)
- Backend dynamically manages container lifecycle (create, start, attach, wait, remove) via Docker Engine API.
- Engineered secure, sandboxed multi-language runtimes in per-submission Docker containers with resource limits.
- Implemented container resource monitoring (CPU/Memory history, I/O stats) using cgroups v2 filesystem API.
- Integrated WebSockets (Melody) for real-time collaboration features (WIP).
- Implemented rate limiting (ulule/limiter with Redis) for API endpoints to prevent abuse.
- Deployed and managed supporting infrastructure: Monitoring (Prometheus/Grafana/Loki), HA PostgreSQL, Redis, Plane.dev.

Strafe - Music Library Engine (dj.cansu.dev)

[🐙 GitHub](#)

[🔗 Link](#)

- Created Go backend (Chi) and CLI (Cobra) for processing/serving music library with vocal/instrumental separation.
- Designed audio processing pipeline leveraging Docker, FFMPEG, ‘audio-separator’, ‘audiowaveform’ for HLS streaming/metadata.
- Manages database schema/queries using ‘sqlc’ and embedded ‘Goose’ migrations for PostgreSQL.
- Stores metadata/compressed waveforms (zlib) in PostgreSQL; serves audio/art from Cloudflare R2 via REST API.
- Managed S3 object uploads, structured paths, and retrieval logic for audio segments and cover art.

Halycon - Amazon SP-API CLI Utility

[🐙 GitHub](#)

- Developed Go (Cobra) CLI for automating Amazon Selling Partner API tasks (Catalog, FBA, Listings); handles API auth/rate limiting.
- Utilized ‘oapi-codegen’ for generating type-safe Go client code from official SP-API OpenAPI specifications.

Automated Server Setup (SaltStack/Vagrant)

[🐙 GitHub](#)

- Automated multi-machine (WordPress/CentOS, MySQL/Ubuntu) server provisioning and configuration using SaltStack.
- Managed VM creation, private networking, and Salt Minion bootstrapping across different OSes using Vagrant.
- Utilized SaltStack Pillar for managing environment-specific data and credentials securely.
- Configured system services (MySQL, Nginx, PHP-FPM), users, firewall rules, and cron jobs using Salt states.
- Leveraged Salt Grains to apply OS-specific package installations and configurations conditionally.

Education

Eastern Mediterranean University

Famagusta, TRNC

B.S. in Computer Science (Expected Graduation: 2025)