

# Edoardo Canobbio

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## Core Skills

- **Languages:** Go, TypeScript, Java, Python, PHP, Common Expression Language (CEL)
- **Datastores:** CockroachDB, PostgreSQL, Neo4j, MongoDB, MySQL, Redis, DynamoDB
- **Infrastructure & Orchestration:** Amazon Web Services (AWS), Google Cloud Platform (GCP), Kubernetes (K8S), Docker, Terraform, CI/CD, Grafana
- **Distributed Systems & Architecture:** gRPC, Event-Driven Architecture, Temporal, Microservices, Multi-Region Deployments, Server Sent Events (SSE)
- **Security & Policy:** Token Delegation, Contextual Authorization, Secret Management
- **Engineering Practices:** Test-Driven Development (TDD), End-to-End (E2E) Testing, Agile Leadership, Observability, Feature Flagging

## Professional Experience

### Senior Software Engineer (Platform) – IndyKite (Remote) | Aug 2023 – Present

Golang | GCP | gRPC | Neo4j | CockroachDB | K8S | Docker | Temporal | CEL | A2A | MCP | Redis

**Designed a policy-aware AI Agents Gateway** leveraging **Context Graphs** for real-time, context-based authorization of multi-agent chains. Integrated OAuth-based delegation to ensure identity-bound isolation, **anchoring the company's market strategy** through a high-profile pilot at the **Neo4j Context Graph Meetup**.

**Engineered an event-driven Data Orchestration Layer** to automate entity matching and trust scoring for Identity Knowledge Graph (IKG) enrichment. By streaming **500GB+** JSON reports directly from GCS into the IKG, I reduced peak memory usage from OOM-levels to **~181MB**.

**Led a zero-downtime migration from Neo4j to CockroachDB** to enable multi-region scaling and **global market expansion**. Orchestrated a phased dual-write rollout using granular feature flags, consolidating 15 unstructured graph node types into 10 relational tables.

**Standardized Security & Observability** across 13 microservices to **achieve SOC-2 compliance**. Implemented a lazy re-encryption strategy via GCP Secret Manager. Architected distributed tracing with public-entry sanitization, reducing **MTTR by ~50%** and establishing a "paved path" for other engineers.

**Designed a Production Readiness Framework** to gate traffic during cache/DB warm-up phases; **eliminated 30% of request failures** by enforcing Kubernetes-native lifecycle probes as a company-wide reliability standard.

### Senior Software Engineer (Payments) – Glofox (Remote) | Promoted Sep 2021 – Aug 2023

Golang | AWS | gRPC | MongoDB | Terraform | MySQL | Docker | PostgreSQL | DynamoDB | Redis | NodeJS

**Re-architected a notification engine** into a **multi-tenant sharded queue architecture**. Decoupling high-volume enterprise traffic from smaller clients, enabling independent horizontal scaling, and **reducing peak latency from 90 minutes to 12 minutes**.

**Decoupled core logic from a legacy PHP monolith** into a Go microservice, eliminating state-machine inconsistencies. This resolved **150+ customer-impacting defects**, driving increased product adoption.

**Led technical onboarding and mentorship** for Senior Engineers, Team Leads, and Junior developers, scaling team velocity by **establishing consistent patterns** for Go microservices.

## Product Engineer (Platform) – Glofox (Remote) | Sep 2020 – Sep 2021

Golang | AWS | gRPC | MongoDB | DynamoDB | Terraform | REST | PostgreSQL | PHP | Docker | TypeScript

**Architected a REST-to-gRPC gateway** using a custom reverse proxy to enable Swagger/OpenAPI documentation for internal gRPC APIs. This **improved cross-team developer experience**.

**Established the organization's testing standard** by implementing a comprehensive Unit and E2E testing guideline. This **eliminated architectural drift** across the ecosystem establishing a company-wide standard.

## Full-Stack Developer – ti&m (Frankfurt) | Oct 2019 – Aug 2020

Golang | Java | TypeScript | Firebase | REST | MySQL | Docker | Tensorflow | React

Reduced image recognition latency **from 10s to 150ms** by migrating Python ML to TensorFlowJS, enabling real-time routing decisions for rail operations.

**Engineered an ETL pipeline Proof-of-Concept** for a major German financial institution; the successful technical validation directly resulted in a **new client acquisition** for the company.

## Security Intern – Certimeter (Turin) | 2017 – Nov 2017

Java | JavaScript | IBM Tivoli Directory Integrator | IBM Security Access Manager | OAuth | OIDC

Hardened enterprise API security using Java EE and IBM Security Access Manager; migrated legacy identity data for a major industrial client

## Projects

- **Bitcoin-to-Graph Research:** Collaborating with a **Google research academic** to map the entire Bitcoin blockchain into a queryable and explorable graph database to accelerate **Machine Learning research on blockchain forensics**.
- **reelo.info:** a specialized **Elo rating engine** for mathematics competitions in collaboration with the **University of Trento**. Mentored a university intern through the full development lifecycle.
- **Trading AI Assistant:** an autonomous agent that synthesizes market signals and sentiment analysis into actionable summaries using **Gemini LLM**.
- **Poly-Route:** a low-latency, pluggable, **multi-protocol transparent reverse proxy** in Go.

## Technical Leadership & Talks:

- **Introduction to Go for Java Developers:** Conducted deep-dive sessions on memory management and concurrency for engineers transitioning stacks.
- **Clean Architecture & gRPC:** Presented on designing maintainable microservice boundaries and high-performance inter-service communication.

## Education & Languages

- **BSc Computer Science:** University of Turin, 2015–2018.
- **Certifications:** AWS Cloud Practitioner (2020), Scrum Developer & Master (2019).
- **Languages:** Italian (Native), English (C1), German (A2).