

Youssef Benkdane

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 github.com/obito

Senior Backend & Cloud Systems Engineer specialized in building scalable cloud-native architectures using Go, Rust, and Python. Experienced in designing event-driven systems, serverless platforms, and scalable infrastructure on GCP and AWS.

EDUCATION

- **Jean-Pierre Vernant High School** Paris, France
High School Diploma - Mathematics & Computer Science 2022
 - **Achievements:** Winner of Hackathon 2022; Led organization of student hackathons and mentoring initiatives
 - **Focus:** Specialized in mathematical, numerics and computer science

EXPERIENCE

- **TF1** Paris, France
Back-End Software Engineer July 2023 - Present
 - **Adventory Platform:** Led the design and development of Adventory, TF1's unified ad management and billing platform, generating over \$200M/year in revenue across segmented TV and streaming.
 - **Backend Systems:** Engineered WizAds ad proxy services in Go, enhancing real-time ad delivery to apps, IPTV, and Connected TVs, with partner-specific enrichment and optimization.
 - **Scale & Performance:** Handled high-throughput workloads (millions of daily ad requests) with sub-200ms delivery guarantees across distributed environments.
 - **Distributed Architecture:** Designed and maintained production-grade distributed systems (Go, Kafka, Redis, SQS, DynamoDB) supporting both live and VOD ad serving.
 - **Infrastructure & Deployment:** Managed AWS infrastructure and ArgoCD-based CI/CD pipelines using Terraform, ensuring scalable and reliable deployments.
 - **Monitoring & Observability:** Implemented Datadog-based observability with business-critical metrics, improving operational monitoring and decision-making.
 - **Testing Infrastructure:** Contributed to Wizfy, an end-to-end testing framework leveraging MITM proxy setups for precise ad-system validation.
 - **Audience Targeting Systems:** Built CEDEX and audience data importers, enhancing targeted advertising capabilities across TF1's platforms.
- **Polyfact** Paris, France
Freelance Software Engineer November 2024 - March 2025
 - **Platform Architecture:** Led the technical direction and re-architecture of the entire Polyfact platform, migrating from monolithic infrastructure to an event-driven cloud-native system using GCP Cloud Run, Pub/Sub, and Workflows.
 - **Media Processing Pipelines:** Designed and implemented asynchronous pipelines for downloading, processing, and analyzing VOD and live streaming content, significantly improving scalability and reliability.
 - **Cost Optimization:** Reduced infrastructure costs by over 50% by decoupling high-load processes, optimizing resource allocation, and implementing on-demand media processing services.
 - **Real-Time Alerting System:** Built standalone alerting services to trigger real-time notifications based on live transcription analysis, increasing platform responsiveness.
 - **Infrastructure Automation:** Introduced Terraform-managed infrastructure, enabling rapid and reliable deployments with clear dev/prod separation and streamlined release workflows.
- **ThemeCloud** Remote
Back-End Software Engineer November 2021 - July 2022
 - **Infrastructure Redesign:** Re-architected WordPress hosting infrastructure from a monolithic platform to a microservices-based system using GCP, Kubernetes, and Go.
 - **Scale-to-Zero Optimization:** Implemented KEDA-based scale-to-zero system for WordPress pods, dynamically shutting down idle instances and reducing hosting costs by approximately 50%.
 - **Backend API Development:** Developed custom REST APIs in Go for managing Kubernetes resource orchestration and integrating WordPress user actions.
 - **WordPress Plugin:** Built a WordPress plugin enabling users to restart pods and manage backend operations directly from their dashboards, improving UX and reducing support load.
 - **ProxySQL Management:** Created Kubernetes controllers to manage ProxySQL instances and associated GCP resources, enhancing database scaling and infrastructure stability.

- GitHub** Remote
Freelance Software Engineer *August 2019 - September 2021*
 - **Open Source:** Developed and maintained popular repositories in Rust, Go, and JavaScript
 - **API Development:** Built APIs using SOLID architecture with PostgreSQL and JWT
- CoinArc** Remote
Software Engineer / DevOps *May 2020 - July 2020*
 - **Backend Development:** Designed and implemented cryptocurrency trading platform backend using NodeJS and TypeScript
 - **Architecture:** Built robust API using SOLID principles ensuring scalability and maintainability
 - **Integration:** Implemented secure payment gateway integrations with SafeCharge and Coinbase Pro
 - **Security:** Developed JWT-based authentication system with role-based access control
 - **Infrastructure:** Managed AWS infrastructure including S3 for storage and deployment automation
- Lick** Remote
Software Engineer / DevOps *April 2020 - June 2020*
 - **Full Stack:** Developed forum platform using Go for backend services and Node.js for frontend components
 - **Real-time Features:** Implemented WebSocket-based notification system for instant user updates
 - **API Design:** Created RESTful API following SOLID principles with comprehensive documentation
 - **Database:** Optimized PostgreSQL database queries and implemented efficient data models
 - **DevOps:** Set up continuous integration/deployment pipeline and monitoring systems

PROJECTS

- **Soucoupe CLI** - github.com/Soucoupe/soucoupe-cli: A cross-platform CLI sneaker bot built in Go, supporting automated purchases for 8+ retail sites (AWLab, Courir, Snipes, Mesh, Supreme, etc.). Features include bulk task creation, SQLite profile storage, proxy management, and logging system.
- **Cookie API** - github.com/Soucoupe/cookie-api: A Go API that programmatically generates Akamai and PerimeterX cookies through reverse-engineered browser behavior. Used for automated bot bypassing of anti-bot protections. Includes support for mouse simulation and TLS fingerprint spoofing.
- **Neuravid.io** - neuravid.io: A SaaS built with Go and Rust, generating structured insights from video content (transcription, semantic search, conversational AI). Designed for speed and multi-modal interaction with video data.
- **TLS API** - github.com/obito/tls-api: Go API to spoof TLS fingerprints (JA3 / JA4), designed to evade detection in automated environments. Built for internal research on bot security and browser fingerprinting.
- **gomouse** - github.com/obito/gomouse: A Go library that mimics human-like mouse movement for automation tooling. Used internally for reverse-engineering and bot navigation.

TECHNICAL SKILLS

- **Languages:** Go, Rust, Python, TypeScript, C
- **Cloud & Infrastructure:** Google Cloud Platform (GCP), AWS, Terraform, Docker, Kubernetes, ArgoCD
- **Databases:** PostgreSQL, Redis
- **Architecture Patterns:** Microservices, Event-Driven Systems, Serverless, REST APIs, Infrastructure as Code (IaC)
- **Tools:** Git, FFmpeg, Pub/Sub Messaging, Cloud Workflows

LANGUAGES

- **Fluent:** French (Native), English (Bilingual)
- **Basic:** Arabic, Spanish, Chinese