

Taleh Ibrahimli

Lead Software Engineer (Rust/Go/Java) · High-Load Distributed Systems · Ultra-Low Latency Design

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Barcelona, Spain

Professional Summary

Lead Software Engineer with 10+ years of experience combining hands-on coding (Rust, Java, Go, AWS) with technical leadership. Specialist in building high-load distributed systems, ultra-low latency design, and low-level programming. Experienced in leading development teams while remaining an individual contributor (Player-Coach). Open to Relocation (Highly Skilled Migrant) or B2B Contract.

Skills

- Programming Languages:** Rust, Java (8+ yrs), Go (5+ yrs), Kotlin, C/C++, TypeScript/JavaScript, Python
- High Load, Ultra-Low Latency & Distributed Systems:** High-load & ultra-low latency design, High-load Distributed Systems, CPU profiling with perf, low-level programming, Spring Boot, Spring WebFlux/Reactive (Project Reactor, Netty, RxJava), REST/gRPC, caching (Redis), messaging (Kafka/Kinesis/SQS), event-driven/CQRS
- Cloud Architecture & Platform (AWS):** VPC, EC2, ALB/NLB, Lambda, API Gateway, S3/CloudFront, RDS/Aurora, DynamoDB, ECR/ECS/EKS, EventBridge, SQS/SNS, Kinesis, Step Functions, OpenSearch; IaC: Terraform/CDK; Well-Architected, cost optimization, resiliency
- DevOps & SRE:** Kubernetes, Docker, Argo CD, Helm, Jenkins, CI/CD, observability (CloudWatch, X-Ray, Prometheus, Grafana, OpenTelemetry), blue/green & canary, incident response
- Data & Storage:** PostgreSQL, MySQL, DynamoDB, Redis, OpenSearch/Elasticsearch, Redshift; streaming pipelines; OLTP/OLAP design
- Security & Compliance:** HSM, CloudHSM, KMS, PKI infrastructure, Cryptography, IAM, WAF, Cognito, OAuth2/OIDC, Secrets Manager; encryption at rest/in transit; GDPR/PCI awareness
- Technical Leadership & Practices:** Technical Mentoring, Code Reviews, Architecture Decision Records (ADR), DDD, Microservices Patterns, TDD, Agile/Scrum, CI/CD Strategy
- AI/LLM Systems:** RAG, agentic/tool-use workflows (LangChain/LangGraph); vector search (MongoDB vector/Postgresql pgvector); small models (Llama/Mistral, etc.); guardrails & cost/latency tuning

Experience

Lead Backend Engineer (Golang/AWS)

[2K GROUP](#)

07/2022 - Current

- Principal Engineer and Technical Lead for the EvenPlay project. I balanced hands-on coding in Golang with leading the backend team, establishing architectural standards, and mentoring engineers.
- Key Contributions:**
 - Backend Development (Hands-on):** Developed the core backend infrastructure using Golang, ensuring low-latency gameplay mechanics and reliable server-side functionalities.
 - Technical Leadership:** Led the backend team through code reviews and technical planning. Defined the microservices roadmap and mentored developers on Go/AWS best practices.
 - Cloud & Orchestration:** Orchestrated the deployment on AWS using Kubernetes (EKS) and Terraform. Integrated SQS, SNS, and RDS for high scalability.
 - CI/CD & GitOps:** Built automated pipelines with Jenkins and implemented GitOps using Argo CD for reliable releases.
 - Python & Computer Vision:** Built Python-based services employing machine learning for body/face detection.
- Impact:** Delivered critical high-load components while leading the team to improved code quality and faster delivery cycles.

Senior Software Engineer (Security Focus)

[Billing Platform](#)

04/2021 - 07/2022

- Key contributor to the platform's security architecture. Leveraged AWS CloudHSM, KMS, PKI infrastructure, and Cryptography (Java, Spring Boot) to implement robust application-level encryption and secure key management.
- Key Contributions:**
 - Application Level Encryption & HSM:** Led the development of encryption techniques using AWS CloudHSM and KMS to protect application data, ensuring high-assurance security and confidentiality.
 - PKI & Cryptography:** Implemented PKI infrastructure and cryptographic protocols for secure service communication and data integrity.
 - Oauth2 Implementation:** Orchestrated the integration of Oauth2 authentication across microservices, establishing a centralized security mechanism.
- Impact:** Strengthened data protection and streamlined authentication across the microservices ecosystem.

Lead Java Engineer (Microservices Migration)

[GoldenPay](#)

05/2020 - 05/2021

- Technical Team Lead for the migration of a legacy payment gateway. I led the team in decomposing the monolith into microservices while actively writing core Java/Kotlin code.
- **Key Contributions:**
 - **Microservices Transformation:** Architected and implemented the move from monolith to microservices, ensuring seamless integration.
 - **Technical Mentorship:** Guided the development team through the transition, introducing patterns for distributed systems and ensuring high code quality.
 - **Performance & Security:** Implemented robust security measures and optimized transaction performance through hands-on refactoring.
- **Impact:** Accelerated time-to-market and successfully led the team through a complex architectural transformation.

Software Engineer

[Crossover](#)

04/2017 - 12/2019

- **Aurora — CxProcess & M1 AlertFind:** Contributed to two key Aurora portfolio products focused on process orchestration.
- **Responsibilities:**
 - Modernized legacy Java applications by designing a higher-level API layer.
 - Refactored backend services to align with new API contracts.
 - Built a high-level Angular application integrated with modernized REST APIs.
- **Impact:** Reduced coupling and enabled iterative migration without disrupting operations.

Java Backend Developer

[Apexx](#)

11/2015 - 04/2017

- **Impact:** Contributed to backend service stability and delivery; improved reliability and code quality.

Java Backend Developer

[Baku State University](#)

01/2014 - 11/2015

- **E-University:** Developed the main university platform covering the full academic lifecycle.
- **Tech stack:** Monolithic Java backend, PostgreSQL, Sencha/GWT.
- **Impact:** Gained significant knowledge in higher-education processes.

Freelancer

03/2011 - 01/2014

- **Impact:** Delivered end-to-end solutions for small clients; accelerated go-lives.

AI R&D Highlights

The following represent prototypes/experiments and proofs-of-concept (not shipped production systems).

- Designed RAG and agentic workflows with LangGraph/LangChain; explored vector databases (MongoDB/Postgresql).
- Prototyped AI architecture: prompt design, guardrails, and hallucination mitigation.
- Set up evaluation/observability: A/B tests, telemetry, and cost/latency studies.

Open Source

- <https://github.com/tislib/roda-state>: Zero-copy, lock-free multithreaded pipeline in Rust designed for ultra-low latency environments. By heavily profiling the CPU architecture, it bypasses standard multi-threading performance traps to strictly saturate the L1 cache bandwidth.
 - Engineered a zero-copy, lock-free multithreaded pipeline in Rust, achieving a peak algorithmic throughput of 58.7 million elements per second (MEPS) in CPU-bound stateful workloads.
 - Processed 24 million real-world MBO market data events with an unloaded median latency of $1.2\mu s$, completely decoupling disk I/O bottlenecks from the algorithmic hot path.
 - Defeated cross-core MESI protocol overhead by implementing dynamic block processing (read_window), reducing L1 cache misses to 0.73% and boosting IPC to 1.93.
- <https://github.com/apibrew/apibrew>: Low Code system, where you can build entire Rest APIs from UI
- <https://github.com/tislib/logi>: DSL language definition system, where you can define your own dsl syntax and logi will parse it.
- <https://github.com/tislib/download-delegator>: A tool for parallel web page downloading, compatible with EC2 and AWS Lambda, enabling efficient bulk downloads.

Certifications

- AWS Certified Solutions Architect – Professional (in-progress, scheduled)
- Certificate: Semi-Finalist of ACM Programming Contest in Georgia, 2013
- Certificate: High Achievement certificate of ACM Programming Contest, 2013

Education

- Bachelor's degree in Computer Science and Applied Math — Baku State University (2010 - 2014)