Konstantin **Ezra** Gonciarou

Senior Software Engineer - System Architect

Yerevan, Armenia [Remote | Relocation]

LinkedIn | Github | Telegram | kostya.gonciarou@gmail.com | +374 55-36-34-57

"Untrodden shores do call and beckon | While kindred hearts uphold and reckon"

Summary

Highly skilled Senior Software Engineer and System Architect with extensive experience in developing scalable, secure, and high-performance systems across diverse industries, including pharmacology, healthcare, energy, and fintech. Proficient in microservices architecture, system modernization, and building end-to-end solutions with robust data integration and advanced monitoring capabilities. Proven track record in delivering GDPR and PCI DSS-compliant platforms for large user bases, optimizing workflows, and enhancing system reliability. Adept at leading teams, planning major releases, and addressing complex technical challenges.

Professional Experience

Insilico Medicine link

Remote, Abu Dhabi, UAE

Senior Software Engineer / System Architect

October 2023 – April 2024

GDPR-compliant AI solutions for clinical trial and healthcare analytics across two flagship products.

- **Enhanced User Experience & Efficiency**: Designed and implemented features for clinical trial data analysis using proprietary pretrained LLM models. Developed RAG (Retrieval-Augmented Generation) endpoints to enrich query contexts, advanced data representations, and user management features, resulting in a 80% reduction in administrative workload and improved scalability.
- **Infrastructure Modernization**: Migrated deployments from Docker to Kubernetes, improving scalability, runtime control, and release frequency.
- **Real-Time Data Integration**: Transitioned backend architecture to leverage a data lake via APIs, delivering faster access to real-time, up-to-date data.
- **ETL Pipeline Development**: Built robust ETL pipelines to scrape, transform, and integrate clinical trial data into a data lake. Enhanced AI model retraining accuracy by providing enriched and current datasets.
- **AI Prototyping**: Developed a clinical trial site selection prototype using AWS Bedrock, vector databases, and custom data enrichment, optimizing team workflows and project timelines.
- **Release Management & Production Monitoring**: Planned, executed, and monitored major product releases, ensuring stable production environments with proactive reporting and issue resolution.

Tech Stack: Python • Go • Django • FastAPI • PostgreSQL • AWS • Kubernetes • Terraform • RabbitMQ • Apache Airflow • Qdrant • GraphQL • gRPC

Haulogy link

Remote, Belgium

Senior Software Engineer

September 2023 – October 2023

- **Performance Optimization**: Migrated backend processes from Pandas to Polars, achieving faster data interpolation and forecasting for clients.

Tech Stack: Python • FastAPI • PostgreSQL • AWS • Kubernetes • Terraform • RabbitMQ • Clickhouse • gRPC • Pandas • Polars

Inplat / Nexign link

Remote, Dubai, UAE

Senior Software Engineer

September 2018 – November 2023

Scalable, secure, PCI DSS-compliant, and high-performance payment platform for large user base

- **Service-Oriented Design**: Architected a microservices-based own payment platform with event-driven communication for core payment operations and asynchronous tasks.
- **Scalable Payment Platform for 20M+ Users**: Designed and launched a PCI DSS-compliant payment solution for web and mobile users, supporting money transfers, marketplace purchases, wallets, tokenized payments (Google/Apple Pay), linked bank cards, recurring payments, installments, and bonus systems. Designed APIs for internal service

communication, developed service components to integrate with client applications, and implemented social network authorization workflows.

- **Legacy System Modernization**: Migrated legacy systems (Tornado/PHP) to FastAPI, significantly improving performance, scalability, and maintainability.
- **Secure Monitoring & Troubleshooting**: Developed a tracing component for structured logging and issue tracking, ensuring sensitive data remained secure during debugging and monitoring. Investigated and resolved payment process issues, ensuring high system reliability.
- **Third-Party Integrations**: Integrated retail fiscal APIs, mobile operator SMS services, user consent workflows via SMS, and tokenized card processing systems.

Tech Stack: Python • FastAPI • Tornado • AioHTTP • SQLAlchemy • Celery • Go • Rust • PHP • PostgreSQL • RabbitMQ • Kafka • Kubernetes • Grafana • Jaeger • GraphQL • gRPC

Progredis *link* — *Moscow, Russia*

Team Lead - Senior Frontend Developer — *September 2015 – July 2018*

Effective Team Leadership, Frontend Modernization, Dynamic Solutions

- **Team Leadership**: Managed a team of 7 developers, establishing efficient workflows.
- **Frontend Modernization**: Redeveloped a document management system using React, replacing the Backbone-based implementation.
- **Dynamic Form Processing**: Created Role/State-based dynamic views/forms using server-generated schemas according to business logic.
- **Complex data visualization in grid**: Created a custom feature-rich grid component for complex data representation according to business logic and document/user context.

Tech Stack: TypeScript • React • Java • PostgreSQL • MySQL • GraphQL

Previous Work Experience Highlights

- Built a user moderation platform for a high-traffic news site (React/Django).
- Designed trade statistics and user verification systems for a Bitcoin marketplace (Django/MySQL).
- Developed a vector-based semantic news feed attribution system for a national news portal (Java/Node.js).
- Launched an off-market stock trading system via a desktop messenger (C++).
- Led data migration and ETL process development for a major bank (Python/SQL).

Skills

Architecture & Design	AI integration, Microservices, Event-Driven Design, Scalable Systems
Backend Development	Python (FastAPI, Django, SQLAlchemy, uv, Pandas/Polars, PyTorch), Go, Rust, TypeScript
Data Integration	ETL Pipelines, Data Lakes, PostgreSQL, Qdrant, Clickhouse, MongoDB, Redis, Kafka, RabbitMQ
DevOps & Infrastructure	Conteinerization, IaC, Kubernetes, AWS, Gitlab, Ansible, Terraform, ArgoCD
AI & Machine Learning	LLMs, Agents, RAG, LLM chains, Vector Databases, AWS Bedrock
Monitoring & Debugging	OpenTelemetry, Grafana, Jaeger, Tracing, Secure Logging
Frontend Development	React, TypeScript, JavaScript, TailwindCSS, GraphQL
Team Leadership & Collaboration	Team Management, Cross-Functional Coordination, Agile Methodologies, Jira, Miro
Integrations	gRPC, OpenAPI, Tokenized Payments (Google/Apple Pay), Social Network APIs

Education

University of Inrenational Relationships — *Moscow, Russia*

Master of Law — *May 2005*

Pluralsight — *pluralsight.com/profiles/kostya-gonciarou*

AWS Certified Solutions Architect — *2024*