

Nihad Aslanzade – Statistician/Full-Stack Engineer

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Summary

Statistician and Full-Stack Engineer (MSc Statistician, Sapienza University) with a strong foundation in advanced statistical modeling, system architecture, and machine learning. As a State Program recipient and mathematics olympiad finalist, I excel at bridging the gap between rigorous data analysis and scalable software engineering. Proven track record in designing end-to-end data architectures, deploying real-time AI pipelines, and analyzing complex user behavior or spatial datasets for high-traffic platforms. Adept at A/B testing, KPI tracking, and applying econometric techniques to optimize product performance, enhance data security, and drive automated, data-informed business strategies.

Professional Experience

System Architect & Full-Stack Engineer (Contract)

EduBrink / Remote

04/2026 – 09/2026

- Infrastructure Revamp & Deployment:** Took over and overhauled the infrastructure of an existing educational platform. Successfully migrated the deployment environment from PM2 to Docker, containerizing the application for scalable and resilient operations.
- Database Migration & Security:** Re-engineered the database architecture, transitioning from MongoDB to PostgreSQL to ensure robust data relational integrity. Identified and patched critical security vulnerabilities to restore overall system health.
- CI/CD & Continuous Development:** Led the full-stack development and continuous integration/deployment (CI/CD) pipelines, ensured seamless feature updates and platform stability.

Full-Stack & DevOps Engineer (Contract)

Ismayilli Vocational State Center / Remote

02/2026 – 04/2026

- End-to-End Platform Architecture:** Engineered and deployed a comprehensive educational management platform. Architected both the frontend and backend systems from scratch to support digital workflows.
- DevOps & Security Hardening:** Streamlined DevOps deployment pipelines for efficient and automated releases. Implemented rigorous cybersecurity measures, including secure access controls, system-wide optimization, and advanced data protection protocols.

Software Architect & AI Engineer

Toppick.io / Remote

11/2025 – 07/2026

- System Architecture & ETL:** Architected a scalable full-stack AI recruitment platform (FastAPI, Next.js, PostgreSQL). Built robust ETL pipelines for structured/unstructured data and managed containerized CI/CD deployments via Docker on Linux VPS.
- Real-Time Streaming & NLP:** Engineered a low-latency interview pipeline integrating LiveKit. Deployed Voice Activity Detection (VAD) and high-accuracy Speech-to-Text (STT) models to extract actionable behavioral metrics from real-time audio/video responses.
- LLM Agents & Statistical Modeling:** Designed data workflows for LLM conversational agents using advanced prompt engineering. Developed a proprietary "Team DNA" psychometric scoring algorithm (Cosine Similarity, Big Five) to predict candidate-to-team culture fit and generate data-backed HR reports.

Lead Software Engineer & Product Analyst

Kranni / Remote

03/2025 – 02/2026

- Full-Stack & Data Infrastructure:** Architected and launched a cross-platform mobile marketplace (Flutter, Django DRF) on the App Store and Google Play. Designed PostgreSQL schemas to capture user telemetry and geolocation data, managing containerized deployments via Docker on a Contabo VPS.
- Spatial Matching Algorithms:** Transitioned the platform from an initial Python/MySQL Telegram MVP to a full application. Developed an optimized "order radar" algorithm utilizing spatial data (Google Maps API) and statistical distance modeling to significantly reduce customer-artisan matching latency.
- A/B Testing & Product Strategy:** Executed statistical A/B testing (t-tests, p-values) on push notification payloads to maximize order acceptance rates. Analyzed user funnel data to identify registration bottlenecks, driving actionable UI/UX improvements and powering real-time BI dashboards.

Sales Analyst

Sulax (sulax.com.tr) / Baku, Azerbaijan

05/2023 – 07/2023

- **Sales & Performance Reporting:** Analyzed cross-channel sales metrics and compiled comprehensive performance dashboards, streamlining the reporting process and providing management with clear visibility into key revenue drivers.
- **Trend Forecasting:** Formulated short-term revenue projections based on historical sales patterns, enabling the business to identify high-growth opportunities and optimize resource allocation.
- **Market Research & Strategy:** Executed competitive market research and consumer trend analysis, delivering actionable insights that supported the optimization of pricing and targeted promotional strategies.
- **KPI Tracking & Optimization:** Tracked and evaluated core sales KPIs to identify performance bottlenecks, recommending targeted strategies that improved overall sales team productivity and conversion rates.

Economic Analyst (Intern)

Cabinet of Ministers of the Republic of Azerbaijan / Baku, Azerbaijan

02/2023 – 05/2023

- **Macroeconomic Research & Analysis:** Analyzed key macroeconomic and regional development indicators using Advanced Excel (Power Query, Pivot Tables) and Python (Pandas) to support evidence-based policy research.
- **Socio-Economic Reporting:** Consolidated and verified large-scale socio-economic datasets from various governmental bodies, identifying and resolving data discrepancies to ensure the absolute accuracy of official economic reports.
- **Strategic Insights & Forecasting:** Assisted senior economists by synthesizing complex regional financial data into actionable insights, contributing to the preparation of analytical briefs and short-term economic forecasts.

Education

MSc in Statistical Methods and Applications

09/2023 – 01/2026

Thesis: "Exploration of Adaptive Algorithms"

Sapienza University of Rome / Rome, Italy

BBA in Economics

Thesis: "Tax Evasion, Tax Audit and Analysis"

Academy of Public Administration under the President of the Republic of Azerbaijan / Baku, Azerbaijan

09/2019 – 06/2023

Languages

- **English** – Full Professional Proficiency
- **Azerbaijani** – Native Proficiency
- **Italian** – Elementary Proficiency
- **Russian** – Elementary Proficiency
- **Turkish** – Full Professional Proficiency

Skills

- **Programming Languages:** Python, R, Bash, SQL, HTML.
- **Data Analysis&Dev Tools:** Tableau, Power BI, Pandas, Numpy, Scikit-Learn, TensorFlow, MATLAB, SPSS, SAS, IBM ILOG CPLEX Optimization, SQLAlchemy, Pydantic.
- **Version Control&DevOps:** Git, Docker, VPS/VDS Management, Nginx, CI/CD Pipelines, Redis, PostgreSQL, Celery.
- **MS Office Suite:** Word, Excel, PowerPoint
- **AI & Engineering:** Large Language Models (LLMs), Prompt Engineering, Retrieval-Augmented Generation (RAG), Audio Processing Pipelines, PyQt5 / Qt Graphics Framework .
- **Others:** Sales Strategies and Marketing, Public Speaking, Optimizing Algorithms, Survey Sampling, Econometric Techniques, Product Management.

Certifications

- **Google Data Analytics Professional Certificate:** Google / Coursera | 08/2026
- **Machine Learning Using SAS Viya:** SAS / Coursera | 10/2024
- **Python for Data Science, AI & Development:** IBM / Coursera | 09/2023
- **Introduction to Artificial Intelligence (AI):** IBM / Coursera | 08/2026
- **Economics of Money and Banking:** Columbia University / Coursera | 04/2023
- **Stochastic Processes, Markov Chains and Markov Jumps:** Udemy | 01/2024