Nikita Orlov

Staff Backend Engineer · Database Internals, Security & Data Platforms

Tbilisi, Georgia · Open to relocation (UK, UAE, US) or remote
+995 511 211 372 · me@naorlov.dev · naorlov.dev · linkedin.com/in/naorlov

SUMMARY

Backend and database engineer with 6+ years building query languages, access-control systems and large-scale data platforms. Currently one of two core engineers at an analytical database startup, owning the PostgreSQL-compatible SQL grammar, the security stack from RBAC to object storage, and the AI layer. Previously hired and led a team building a 100+ TB market-data platform at a high-frequency trading firm. I build languages and interfaces that make complex systems simple for the people using them.

EXPERIENCE

Tengri Data — *Lead Software Engineer* May 2025 – Present

Distributed on-premise analytical (OLAP) database; two-engineer core team; deployed at 8 customer sites.

- Own the SQL front end: designed and maintain the ANTLR grammar and parser targeting PostgreSQL compatibility.
- Built the role-based access control engine from scratch, validated against PostgreSQL's own privilege tests and extended beyond it with temporal (time-bound) grants.
- Designed and built an S3 access proxy in Go that enforces database grants on object storage: per-user credential minting, prefix-level GRANT … ON PREFIX, and SigV4 streaming-signature verification and re-signing.
- Shipped admin-facing features: S3 file tree browser, grants viewer that explains *why* a user holds a privilege, and guided LDAP integration setup.
- Lead the AI layer: agent harness and long-term memory that let small open-weight models answer business questions over customer data; building custom analytical evaluation scenarios (to be open-sourced) on which small models outperform their baselines.

BHFT — *Lead Data Engineer* Jan 2024 – May 2025

Proprietary high-frequency trading firm.

- Hired and led a team of 2 engineers; owned roadmap and architecture of the firm-wide market-data platform.
- Designed a 100+ TB platform (Python, Go) unifying historical data from exchanges and data vendors, used by all quant researchers.
- Built one interface for both systematic backtests and hand-written research experiments; backtests over hot data finish in a couple of minutes.

Software Engineer Mar 2023 – Jan 2024

- Owned data integration for the equity-balancing system, connecting all major crypto exchange APIs at production trading volume.

Avito — *Senior Data Engineer* (promoted from Data Engineer) Oct 2020 – Oct 2022

Data warehouse unit of Russia's largest online classifieds marketplace.

- Created an ANTLR-based DSL for describing data pipelines and anchor-model entities, cutting pipeline time-to-market from 1 month to 1 day.
- Grew adoption to 500+ users and 20% of all warehouse pipelines; reduced DWH team workload by 50%.
- Optimized Vertica pipelines for performance and scale; automated the pipeline development and review process.

SKILLS

Languages	Python, Go, SQL, Julia
Databases & storage	PostgreSQL semantics, OLAP engines, Vertica, ClickHouse, S3 / MinIO
Parsing & DSLs	ANTLR, parser and DSL design, SQL dialects
Security	RBAC design, LDAP, S3 SigV4, credential management
AI	LLM agent harnesses, agent memory, evaluation design, open-weight models
Leadership	Hiring, team setup, architecture ownership, cross-team platform adoption

EDUCATION

HSE University (Higher School of Economics) — BSc, Computer Science 2016 – 2020