Nikolay Kudinov

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SUMMARY

Highly skilled backend developer with expertise in designing and optimizing distributed systems and data-intensive applications. Proficient in Java, Scala with extensive experience in building highly scalable, fault-tolerant solutions for e-commerce and financial domains. Deep knowledge in database internals, query optimization, and performance tuning, with a proven ability to enhance system reliability and efficiency.

EXPERIENCE

Senior Software Engineer
05/2021 – Present

Zalando — *Berlin, Germany*

- Designed and implemented an innovative suspicious activity detection system based on address similarity, capable of detecting 97% of similar addresses, significantly improving genuie customers purchase success rates for popular items.
- Developed an emergency onboarding process of hyped articles to stabilize systems during peak demand, ensuring consistent availability and enhancing the fault tolerance of the entire Zalando system.
- Optimized backend algorithms to improve the turnover of limited-stock items, resulting in increased sales performance.
- Communicated effectively and closely collaborated with other teams during the collection requirement phase for GhostAds, leading efforts to ensure cross-functional alignment.
- Optimized the Ad Campaign Management endpoints, reducing response latency by 40% and enhancing system throughput, significantly improving the Ads platform's responsiveness under high-load conditions.

Senior Java/Scala Developer
09/2014 – 04/2021

Deutsche Bank — *Germany*

- Developed and optimized Job Manager, a system for tracking trade processing job statuses, enhancing monitoring and efficiency.
- Reduced Input Data Cache (IDC) startup time by 60%, improving data availability for a 15K-node calculation grid that supports trade, market, and reference data.
- Optimized CVA risk calculations, reducing processing time from 24 hours to 4 hours, enabling multiple intra-day recalculations and enhancing business agility.
- Developed multiple data collectors to gather trade and risk data, supporting FRTB (Fundamental Review of the Trading Book) compliance by ensuring accurate capital calculations under Basel III regulations.

Senior Software Engineer
10/2012 – 08/2014

Rostelecom — *Russia*

- Developed multiple extensions for the General Ledger module, improving functionality and integration within the financial system.
- Proactively optimized system performance, enhancing overall efficiency with a focus on salary calculation processes, the most critical system component, through advanced SQL tuning and query optimization.

Software Engineer
11/2006 – 10/2012

Luxoft (Dell Dedicated Center) — *Russia*

- Developed an Order Rejection System, streamlining error detection for the support team and improving issue resolution during order processing.
- Led the development of an interface to efficiently load orders into the core backend system, enhancing order processing workflows.
- Spearheaded a global data invoice and order migration project for 16 APAC business units, ensuring seamless data transition and system integration.

LEADERSHIP

- Moderator for the DDIA & System Design Telegram community, comprising 1,400+ job seekers and industry mentors. Actively involved in moderating online events focused on discussing and analyzing research papers related to distributed systems.
- Founder of the largest Apache Spark Telegram community. Organized and hosted 10+ online meetups in 2020, focusing on Apache Spark internals. Delivered presentations, available at: `apache_spark_pptx`.

Education

Moscow Aviation Institute (National Research University)

Master's Degree, Applied Mathematics

Skills, Licenses, and Certifications

- **Programming Languages:** Java, Scala, SQL, PL/SQL, Python

- **Databases & Storage:** Oracle, PostgreSQL, ClickHouse, DynamoDB

- **Distributed Systems & Data Processing:** Apache Spark, Flink, Akka Streams, Alpakka, Apache Kafka

- **Backend & Cloud Infrastructure:** Spring Boot, Kubernetes, AWS (IAM, S3, DynamoDB)

- **Performance Optimization:** Advanced SQL tuning, query optimization, database internals, and high-throughput system design

- **Certifications:** Oracle Certified Professional, Java SE 8 Programmer, Functional Programming Principles in Scala