GESER DUGAROV, Ph.D. | Software Engineer, Big Data Engineer

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profiles: LinkedIn, GitHub

SUMMARY

Software Engineer developing core functionality in a Data Lakehouse platform to extract value from PB-scale data. Also contributing to the open-source Apache Hudi project, with a focus on performance and solution usability. Extensive experience in research and data analysis; PhD.

Strong interest in Big Data and Distributed Systems. Personal mission: "Living a balanced life. Helping professionals to work smarter, not harder, by creating automated systems for their routine."

TECHNICAL SKILLS

Java, Python, Maven, PostgreSQL, Docker, Hadoop Ecosystem

WORK EXPERIENCE

May 23 – Current (2+ yrs)   **Software Engineer / Big Data Engineer**, **Huawei Cloud**

- Development of core functionality of a Data Lakehouse platform for Big Data processing on enterprise-level scalable clusters.
- Future Star Award (2024).

Jan 24 – Current (1.5+ yrs)   **Apache Hudi Contributor**, **The Apache Software Foundation**

Apache Hudi is a Data Lakehouse platform that brings database functionality to data lakes and enables incremental processing for low-latency analytics.

- Optimized serialization and deserialization of data stream records in Apache Flink stream writing, resulting in a 30% increase in processing speed and 2x reduction in memory usage (design doc, main changes, umbrella ticket). Released in Hudi 1.0.2.
- Implemented 4 local optimizations ([1], [2], [3], [4]) in Flink stream writing, resulting in a 10% increase in processing speed and 30% reduction in garbage collection overhead. Released in Hudi 1.0.1.
- Contributed 40+ merged pull requests.

Feb 22 - May 23 (1+ yr)   **Software Engineer / ML Engineer**, **Digital Research** (computer vision startup)

- Designed and implemented an event-based architecture for a system for trucks monitoring. Developed server-side image processing handling ~20,000 images per day. In production, the system reduced fleet idle time by 12%.
- Built a customer-facing web UI featuring reports and data visualizations. Also developed an internal web UI for system monitoring.

EDUCATION

PhD, Geophysics, Trofimuk Institute of Petroleum Geology and Geophysics SB RAS

MSc, Computational and Applied Mathematics, Novosibirsk State University

Recent version of CV