
SUMMARY

Experienced software engineer with a dedicated focus on crafting and optimizing high-load low-latent distributed systems. Adept in functional languages with a strong commitment to advancing collaborative software development through active contributions to open-source projects in C++, Rust, and other languages. Notably experienced in effectively managing petabyte-scale systems.

EXPERIENCE

Senior Software Engineer, Wayve Apr 2024 – Present

Senior Software Engineer, Yandex Nov 2022 – Apr 2024

- Co-developed the ClickHouse Keeper utility, enhancing predictable cluster host reconfigurations and saving thousands of dollars in time for on-call and support engineers. Marked as top 2% performers in the company.
- Worked closely on high-load distributed deployment infrastructure serving managed databases layer, reduced ClickHouse Keeper hosts reboot time by almost twofold.
- Led the integration of Google Cloud Platform, introducing it as a new Virtual Machine provider for European clients.
- Prepared and maintained open-source repositories of ClickHouse-related tools (used on each of hundreds of thousands of hosts internally) on GitHub, providing tools for the broader developer community.
- Significantly contributed to making our European infrastructure PCI-DSS compliant.
- **Stack:** C++, Python, Clojure, Linux, Docker, Kubernetes, AWS, GCP, SaltStack, Argo CD, GitHub CI

Senior Software Engineer, Tinkoff May 2022 – Nov 2022

- Designed an in-house GitLab CI replacement for the Tinkoff ecosystem leveraging analytics collection, centralized pipeline steps updates, and a seamless developer experience for Tinkoff employees.
- Led a cross-functional collaboration involving 12 individuals across 5 teams to craft the RFC and unveil a demo, actively contributing to the CI backend developed in Go.
- **Stack:** Go, Linux, Docker, Kubernetes, Argo CI

Software Engineer, Altinity Jun 2020 – Nov 2021

- Designed and implemented a ZooKeeper metadata restoration utility for ClickHouse distributed table engines. This utility effectively curtailed network overhead during the restoration of corrupted tables, translating into substantial cost savings – estimated at tens of thousands of dollars – for ClickHouse users.
- Optimized query processing pipelines for functions operating on dictionary-encoded types, yielding speedups of up to 11 times.
- Streamlined ClickHouse’s type system, introducing the capability to multiply floating-point numbers with decimal formats, broadening the system’s arithmetic functions.
- Contributed to the introduction of “lightweight DELETES”, a more efficient mechanism for data removal from distributed tables, bypassing standard mutation processes.
- **Stack:** C++, Python, Linux, Docker, Kubernetes

Software Engineer, Rebus Capital May 2019 – Jun 2020

- Contributed to a distributed cryptocurrency exchange system by developing web endpoints (REST/WebSockets API), streaming engines, persistent storage, and the control module application.
- Implemented a Protobuf-like code generation tool converting internal schema format to JSON, C structures, and Swagger files, boosting development speed by 2 to 3 times.
- **Stack:** C++, Python, Linux, Docker, Kubernetes

Software Engineer, STEM Games Dec 2017 – Apr 2019

- Led the development of chemistry exploration levels for one of the world’s first VR laboratories, featuring an innovative chemistry model designed by Ph.D. scientists.
- Pioneered a unique UI for VR, incorporating multiple Unity3D interface extensions. This innovative approach, coupled with a no-code levels constructor analogous to Unreal Engine Blueprints, significantly accelerated level creation by 7 to 8 times.
- **Stack:** Unity3D, C#, SteamVR, HLSL, Python

TEACHING EXPERIENCE

Curriculum designer, Higher School of Economics Sep 2021 – Dec 2021

- Shaped an advanced C++ curriculum from scratch for second-grade students in a team of 6, fostering deeper C++ comprehension and readiness for third-grade subjects.
- Crafted meticulous lecture blueprints, seminar frameworks, and innovative homework assignments, guaranteeing an unparalleled learning expedition. Ignited dynamic learning by orchestrating immersive seminars, comprehensive lectures, and tailored guidance. Evaluated student assessments and delivered constructive feedback.
- The course received “Best course for career development” and “Best course for new knowledge and skills” awards, establishing the course among the curriculum’s top offerings.

Calculus teaching assistant, Higher School of Economics Sep 2018 – Jun 2020

EDUCATION

National Research University Higher School of Economics Bachelor of Computer Science in Distributed Systems

Yandex School of Data Analysis Distributed Systems courses