# Oleksandr(Sasha) Syrotenko

Address is available by request

BIO

My official name is Oleksandr, but I prefer the name Sasha.

I am a software engineer with 7+ years of experience in high-performance, distributed systems.

Active open-source contributor.

My main interest is the engineering of reliable, correct and performant software.

Recommendations are available by request.

**AREAS OF INTEREST** 

Database design challenges.

High-performance distributed computing.

- Compiler middle-end and back-end design and development

- Complex systems testing approaches: fuzzy/bounce/chaos testing.

- Concurrent data structures and algorithms.

### HIGHLIGHTS | KEY SKILLS AND ACHIEVEMENTS

• Main programming languages: C++, Rust, Java.

• SQL engine design and development from scratch (Hazelcast).

Distributed stream processing engine design and development.

• DevOps capabilities: Docker, k8s, Terraform. AWS cloud.

- Solid systems and infrastructure programming capabilities and experience.
- Solid concurrency knowledge/experience in building high-load systems.
- Practicing of best practices and the best tools for code quality.
- Constant Computer Science knowledge application in production systems.

## **WORK EXPERIENCE**

#### Gamedev startup, under NDA

Senior Software Engineer/Architect, Contract

- Rust, ScyllaDB, Dragonfly, and Clickhouse.
- Full project from scratch to 100k CCU, including DevOps.

December, 2024 - ...

Kyiv, Ukraine (Hybrid)

Kyiv, Ukraine (Remote) January, 2021 – September, 2024

 Introduced AI agents into team development workflow, leading to enhanced developer productivity.

#### Hazelcast

Senior Software Engineer: SQL engine / Jet stream processing engine maintainer

- Distributed streaming processing engine developer in a diverse distributed team.
- Maintainer of the Hazelcast SQL engine and the Jet stream processing engine.
- Lead the partitioned data processing initiative with leads.
- Designed and developed migration-tolerant index scan support in Hazelcast SQL eng.
- Co-designed and developed stream-to-stream JOIN for SQL and streaming engines.
- Co-designed and implemented streaming window aggregations.
- Integrated multiple paid features in Hazelcast Jet
- Integration and support of SQL engine fuzzy testing (SQLancer).

## Cybervision, Inc

Software Engineer/Performance Engineer, Contract

Kyiv, Ukraine (Remote)

January, 2020 – January, 2021

- Co-designed and developed high-performance IoT agent tool using C++17.
- As a performance engineer, squeezed more than 250% performance improvement compared to the original implementation.
- Developed agent application self-updating algorithm.

## ActiveJ, ex-datakernel.io

Kyiv, Ukraine

Software Engineer in Java performance. Contract

We have done efficient asynchronous Java framework for and scalable web, network and big data solutions.

- Created runtime class tweaking tool- "ActiveJ Specializer".
- Made ActiveJ serializers the fastest(!) in JVM world with my team.
- Made ActiveJ RPC and memcached RPC server one of the most performant in JVM world.
- Provided benchmarks for every major ActiveJ component.

# **Aeneas** *Part-time Software Engineer*

Kyiv, Ukraine

*June* 2019 – *December* 2019

December, 2017 – May, 2019

Created a core and network part of a decentralized distributed platform based on Akka.

#### WORK EXPERIENCE (INTERNSHIP)

**SAP SE**Software Engineer Intern

Walldorf, Baden-Würtemberg, Germany

July 2018 - Sept 2018

## Integrated Google Cloud Functions for SAP DataHub, multicloud tool for data scientists.

# **EDUCATION**

## Taras Shevchenko National University of Kyiv

Software Engineering, Masters, GPA 88.4/100

**Kyiv, Ukraine** Sept 2013 – May 2019