

YAROSLAV TKACHENKO

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Skills

A software engineer and architect specializing in **data-intensive applications**. Very passionate about real-time **data pipelines**, **data streaming**, **stream-processing**, and **distributed systems**.

Background in **web**, **back-end** and **cloud infrastructure** development. Comfortable using **Scala**, **Java**, **Python**, and **Node.js** stacks. A lot of experience with microservices, event-driven architectures, platform engineering, and DevOps.

I'm an international [speaker](#), I write [a technical blog](#) and [a newsletter](#).

Experience

Goldsky

Principal Software Engineer / April 2022 – Now / Vancouver, Canada (*Remote*)

Technical Advisor / January 2022 – April 2022 / Vancouver, Canada (*Remote*)

First hire. Building a serverless data platform that provides streaming SQL transformations and connectors for the decentralized blockchain data.

Architected and led implementation of the control plane (Typescript/Node) and data plane (Java/Scala, Redpanda, Apache Flink, Kubernetes), various connectors (with contributions to Flink CDC).

Leading a small team of data platform engineers.

Shopify

Staff Data Engineer / July 2020 – April 2022 / Vancouver, Canada (*Remote*)

Technical lead for stream processing, part of the Streaming Capabilities team in Data Platform.

Reintroduced Apache Flink at Shopify, drove its adoption and advocated stream processing:

- Worked on Apache Flink libraries, tooling, developer experience and integrations with the Shopify ecosystem. Created technical roadmaps, and maintained Shopify's Apache Flink fork.
- Helped new teams to start building stream processing applications with Apache Flink.
- Built the new flagship analytical pipelines (Scala, Apache Flink, Apache Druid) for user-facing applications.
- Supported a variety of legacy stream processing data pipelines and platforms (Spark Streaming, Apache Beam / Google Dataflow, in-house solutions).

Activision

Software Architect / September 2018 – July 2020 / Vancouver, Canada

Senior Data Engineer / March 2018 – September 2018 / Vancouver, Canada

Senior Software Engineer at Demonware / May 2017 – March 2018 / Vancouver, Canada

Worked on the Data Platform for Activision games.

Initially started in the Data Pipeline team at Demonware (Activision subsidiary), focusing on large-scale ingestion of data and supporting Apache Kafka infrastructure (on-prem and in AWS).

Later transitioned to the Data Services team (now Activision Data) in Central Tech and quickly was promoted to Software Architect responsible for the data pipeline and later for the whole Data Platform.

Key contributions:

- Rearchitected and led implementation of the new realtime streaming data pipeline leveraging Kafka Streams and Kafka Connect. It routinely handled hundreds of thousands of messages per second generated by millions of concurrent players. It ingested, enriched, transformed and routed a variety of data formats from many games, populated the Data Lake (S3, Hive, Presto) and also used Kafka, Cassandra and Elasticsearch as data sinks. The pipeline powered internal reporting and analytics as well as some user-facing applications. Internal users could query data in the Data Lake in 15 minutes or less after it was ingested, compared with 4-6 hours delay when using the old pipeline.
- Co-designed and developed a GDPR-compliant PII pseudonymization pipeline.
- Co-designed and developed distributed caching library (Java, Redis).
- Co-designed and developed data retrieval HTTP service (Python/Flask, Cassandra).
- Contributed to ETL development and frameworks (Hadoop, Hive, Spark, Scala, Java, Python, Airflow).
- Contributed to the design of a unified message envelope, data standards for message schemas, data protocols, Schema Registry and data instrumentation.
- Improved developer experience, observability and CI/CD.
- Designed and implemented a large-scale HTTP ingestion service (Java/Jersey).
- Evaluated and prototyped many data governance solutions.
- Made open source contributions to Apache Kafka and Apache Spark.
- Led cloud migration efforts (AWS to GCP).

Shipped games: Call of Duty: WW2, Call of Duty: Black Ops 4, Call of Duty: Modern Warfare, Call of Duty: Black Ops - Cold War, Call of Duty Mobile, Call of Duty: Warzone, Crash Team Racing, Tony Hawk's Pro Skater 1 + 2.

Mobify

Senior Software Engineer, Lead / November 2016 - May 2017 / Vancouver, Canada

Led the new Platform team, responsible for the core Platform services like content delivery network, platform generator, location services, demo environments and more. Heavily used Node.js, Python, Redis, Docker, AWS and Heroku.

Key contributions:

- Designed and implemented the first AMP (Accelerated Mobile Pages) service (ES6, Node.js, Redis).
- Contributed to the Progressive Mobile SDK (ES6, React).
- Contributed to the realtime data pipeline (Scala, Apache Kafka, Apache Flink).

Bench Accounting

Director of Engineering / October 2015 - October 2016 / Vancouver, Canada

Engineering Lead / April 2014 - September 2015 / Vancouver, Canada

Software Engineer / September 2011 - March 2014 / Omsk, Russia (Remote) -> Vancouver, Canada

Initially worked on the front-end and UI development, rewriting multiple single-page web applications, then started contributing to the API, back-end of the core services and integrations. Finally, I was re-

sponsible for the whole Platform, including infrastructure work, DevOps tools and practices, core back-end services, integrations, microservices architecture and more.

I quickly became a leader for many initiatives and was promoted to Engineering Lead. I led the transition from the Java monolith app to Scala microservices.

As a Director of Engineering, I was responsible for managing multiple teams, working on Platform, infrastructure, API and integrations, and participating in technical discussions, contributing to roadmaps, architecture, and mentoring (but still staying hands-on).

Key contributions:

- Front-end development: rewrote front-end applications from JavaScript/jQuery to CoffeeScript/Backbone.js.
- Back-end development: worked on the core services, APIs, integrations and event-driven microservices (Java/Spring, MySQL/Hibernate, Scala/Akka, ActiveMQ/Camel).
- Designed and implemented realtime eventing infrastructure that powered all user notifications and chat messages (Scala/Akka, ActiveMQ/Camel, Postgres, PubNub).
- Infrastructure: designed a highly-available and auto-scalable set of microservices with unified monitoring and logging (Docker, AWS Elastic Beanstalk, Ansible, Jenkins, Datadog, Splunk) with reproducible environments (Ansible, AWS CloudFormation).
- Implemented end-to-end UI testing (Selenium/Java and Intern.js/CoffeeScript).

Purebulk

Senior Web Developer / March 2010 - July 2011 / Omsk, Russia (Remote)

Worked on the big e-commerce website (powered by Zencart, later transitioned to Magento). Full-stack web development (HTML/CSS/JavaScript, LAMP stack).

Freelance & Digital Agencies

Web Developer / January 2007 - February 2010 / Omsk, Russia

Full-stack web development (HTML/CSS/JavaScript, LAMP stack).

Education

Omsk State Technical University

2007 - 2012 / Omsk, Russia

Master's Degree (equivalent), Software Engineering and System Analysis.