

# YAROSLAV TKACHENKO

Vancouver, BC | 604-230-8734 | [sapiensy@gmail.com](mailto:sapiensy@gmail.com) | [sap1ens.com](http://sap1ens.com)

## Skills

A generalist Software Engineer currently specializing in **data engineering**. Very passionate about **data pipelines** and **stream-processing**.

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

## Experience

### Shopify

**Staff Data Engineer** / July 2020 – Present / Vancouver, Canada

Part of the Streaming Capabilities team in Data Platform.

Reintroduced Apache Flink at Shopify, now driving its adoption and advocating stream-processing.

Currently:

- Building the new flagship analytical pipeline (Scala, Apache Flink, Apache Druid) for user-facing applications.
- Working on Apache Flink tooling, developer experience and integrations with the Shopify ecosystem.
- Supporting 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 responsible 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.