

YAROSLAV TKACHENKO

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Skills

Architecting, designing and building highly scalable and available service-oriented applications with **Scala**, **Java**, **Python**, and **Node.js** stacks. Comfortable with everything between API and infrastructure layers: starting from basic modeling and design, Domain-Driven back-end implementation (functional, OOP, actors), messaging, caching, background jobs, persistence with RDBMS and NoSQL, etc. to complex stateful cluster services, microservices, event sourcing, stream and batch processing.

Currently primarily focused on **data engineering**, **data pipelines**, and **stream-processing**.

Always excited to work on reliable **infrastructure-as-code** and **automation**. Adoring **DevOps** and **Developer Experience**.

Experience

Shopify

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

Part of the Streaming Capabilities team in Data Platform. Driving the adoption of Apache Flink and stream-processing at Shopify. Building the new analytical stack (Flink + Druid) and supporting a variety of legacy stream-processing data pipelines and platforms (Spark Streaming, Beam/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 (Kafka). Worked on the pipeline architecture, infrastructure (Docker, Ansible, Terraform, AWS and on-premises), ingestion HTTP API (Python), custom schema registry, and various consumers and stream processors (Python, Java).

Later transitioned to the Data Services team (now Activision Data). Worked on the large-scale data pipeline (Kafka), ETL (Hadoop, Hive, Spark, Scala, Java), Data Lake / Warehouse (S3, Hive, Presto, Redshift), and related services and APIs (Python, Java, MySQL, Cassandra, Redis). Running on AWS and leveraging Qubole, but transitioning to GCP and Databricks.

I've implemented key components and contributed numerous improvements in areas like data ingestion, data consolidation, data standardization, caching, PII compliance, application metrics, Developer Experience, CI/CD.

In my role as a Software Architect, I was responsible for architecting, designing and building the next-generation large-scale near real-time streaming data pipeline with Kafka Streams and Kafka Connect. It routinely handles millions of concurrent players and hundreds of thousands of messages per second.

I was also driving and participating in many other data platform initiatives in data standardization, data storage and access, data governance, data integration, ETL frameworks, and automation. Led cloud migration efforts (AWS to GCP).

Shipped games: Call of Duty: WW2, Call of Duty: Black Ops 4, Crash Team Racing, Call of Duty Mobile, Call of Duty: Modern Warfare, 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 core Platform services like demo environments, content delivery, platform generator, location services and more. Heavily used Node.js, Python, Redis, Docker, AWS and Heroku.

Tried to invert the Conway's law and build unified Platform from a set of diverse products.

Designed and implemented first AMP (Accelerated Mobile Pages) prototype (ES6, Node.js, Redis).

Contributed to the realtime data pipeline (Scala, Kafka, Flink) and Progressive Mobile SDK (ES6, React).

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

Worked on a front-end and UI first year, rewriting multiple single page web apps, then focused more on 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 always cared a lot about the projects we develop and products we ship. Everything from tiny UI elements to code quality and team motivation. I quickly became a leader for many initiatives and was promoted to the Engineering Lead. As an example, I led the transition from Java monolith app to Scala microservices.

Main projects and achievements included:

- Rewriting front-end apps from tangled jQuery to CoffeeScript, Backbone.js and RequireJS (it was 2012)
- RESTful HTTP API for client and financial data (Scala/Jersey), as well as various APIs for other services and integrations (Scala/Spray)
- Core financial model design and implementation (Java/Spring, MySQL/Hibernate)
- Billing/subscriptions functionality via integration with Stripe (Java/Spring)
- Highly-available J2EE/Tomcat setup with zero-downtime deployment
- Scala/Akka microservice template, supporting tooling and libraries. Used for 10+ services
- Realtime eventing infrastructure that powered all user notifications and chat messages (Scala/Akka, ActiveMQ/Camel, Postgres, PubNub)
- Various integrations including Salesforce, Zuora, FileThis, etc. (Scala/Akka)
- Parsers/scrapers for multiple financial institutions (Scala/Akka)
- End-to-end testing for the whole system (Selenium/Java and Intern.js/CoffeeScript later)
- Creating reproducible infrastructure environments for the microservices architecture (Ansible, AWS CloudFormation)

- Highly-available and auto-scalable set of microservices with unified monitoring and logging (Docker, AWS Elastic Beanstalk, Ansible, Jenkins, Datadog, Splunk)

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

Purebulk

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

Big e-commerce website (up to 20k+ active users daily), responsibilities included:

- Maintenance and feature development (PHP, MySQL)
- Heavy front-end development using various JavaScript frameworks
- Zencart -> Magento migration

Freelance & Digital Agencies

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

Full-stack (HTML, CSS, JavaScript, PHP, MySQL) web development for various clients.

Education

Omsk State Technical University

2007 - 2012 / Omsk, Russia

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

Training & Courses

Serverless Workshop / September 2017 / Amazon Web Services

Implementing Domain-Driven Design workshop / March 2016 / by Vaughn Vernon

Deploying and scaling applications with Docker / September 2016 / Strange Loop

Writing Microservices with Lagom / September 2016 / Strange Loop

Introduction to Rust / September 2016 / Strange Loop

Introduction to Machine Learning Using Spark / May 2015 / Polyglot Unconference

Real World Programming With Haskell / May 2014 / Polyglot Unconference

Certifications

Apache Spark Programming / January 2020 / Databricks

Big Data Analysis with Scala and Spark / August 2017 / Coursera

Principles of Reactive Programming / May 2015 / Coursera

Functional Programming Principles in Scala / June 2014 / Coursera