Ivan Tsukanov

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SKILLS

- 11 years with JVM technologies, 8 years with scala, 5 years with spark, 1.5 years with ZIO

- Libraries: zio stack (zio1, zio2, zio-kafka, zio-streams, config, logging, etc), akka stack (actor, persistence, streams, http), typelevel stack (cats, cats effect, fs2, http4s, doobie), quill, trace4cats, tapir, testcontainers, and many others

- APIs: REST, GQL, gRPC

- Storage systems:
    Relational DBs: Postgres, MySQL, Oracle, MsSQL, Redshift
    NoSQL: MongoDB, Cassandra
    Distributed file systems: hdfs, s3, gs, adl/abfss
    Others: KairosDB, Kafka, ClickHouse

- Clouds: GCP (kubernetes), AWS (emr), Azure (HDInsight)

EXPERIENCE

Scalac   Remotely

Senior Scala Developer   10/2021 – 01/2023

Outsource for Conduktor. Building products that simplify interaction with kafka. Getting info about kafka clusters, management of kafka clusters, building tools for testing user's kafka pipelines. My role – transforming business ideas into backends.

Stack: ZIO1/2, gRPC (zio-grpc), GQL (caliban), quill, postgres, testcontainers

DecisionMapper   Remotely

Senior / Team Leader Scala   12/2017 – 07/2021

Outsource for a big international company (level of S&P 100 by revenue). Was responsible for a big data part of an analytic platform:

- inner architecture of the big data module, almost 200 different spark jobs (adding new jobs, changes with backward compatibility for existing ones, etc)

- integration with third party systems (spark jobserver, databricks, SmartyStreets, etc)

- spark jobs optimizations, spark session tuning. The best optimization reduced execution time from 50 minutes to 5 seconds

- helped DevOps with spark infrastructure (spark sessions configuration, yarn cluster stability, etc). Helped ML python team with spark related questions

- scala/spark team management (candidates' test tasks, tech interview, onboarding process after hiring, mentoring)

- production issues debugging and troubleshooting

Key achievements:

- significantly improved development culture. Added to the mandatory stages of development: git feature branches, code reviews, autotests, CI builds

- increased test coverage to ~95% including integration with Mongo, S3, Postgres, etc and rest api based third-party services. Almost any spark job could be developed on a developer machine locally (minimum bugs, fast time-to-market)

- added an ability to execute scala and python spark jobs inside one spark session (reduced infrastructure costs, increased performance)

- ported several new features and bug fixes from unreleased spark versions into our codebase

Telepado   Remotely

Senior Scala Developer   02/2017 – 08/2017

Worked on the application for paid consultations provision (education, legal advice, etc).

2GIS   Novosibirsk, Russia

Middle / Senior Scala Developer   11/2014 – 11/2016

The largest and most interesting projects with my participation:

- application for accessing and analyzing data stored on Hadoop (business events) by using SQL-like queries. It processed about 10TB of data per day. Based on Spark.

- application for business statistics validation. There was a set of rules defined by the business team that statistics has to satisfy. Based on Spark.

- anomaly detection system. Collecting data from Kafka into a time-series database. Searching for anomalies (using an algorithm from our ML team on R-language). Sending notifications. Based on Spark Streaming, KairosDB, akka, spray.

My role in these projects was: initial requirements gathering and formalization; decomposition into small tasks, project management in Jira; development and support.

BARS GROUP   Novosibirsk, Russia

Middle / Senior Java Developer   07/2013 – 11/2014

Project for the Novosibirsk's government. Digital services for citizens.

Diasoft   Novosibirsk, Russia

Junior / Middle Java Developer   12/2011 – 07/2013

Support and development products from the banking sector.

CERTIFICATIONS

Functional Programming Principles in Scala Coursera 2014

Machine Learning
https://www.coursera.org/account/accomplishments/certificate/4539H5J8HN5T

PORTFOLIO

Testing trading strategies on historical data - https://github.com/itsukanov/stockcharts

Distributed tracing - https://github.com/itsukanov/tracing

DEVELOPMENT CULTURE

I hope you agree with me that the following is important:

- using feature branches to keep the main branch clean and always working

- using code reviews to share knowledge about the project and keep the implementation as simple as possible

- using CI for running tests and deploying via a one-click button

- aiming to 100% tests coverage

EDUCATION

Novosibirsk State University (NSU)   Novosibirsk, Russia

Physics Department, Master of Science (M.S.)   2010