Ivan Tsukanov

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SKILLS

- Almost 10 years with JVM technologies, 6 years with scala, 5 years with spark
- Libraries: akka stack (actor, persistence, streams, http), typelevel stack (cats, cats effect, fs2, http4s, doobie), quill, slick, trace4cats, tapir, testcontainers, spark jobserver, and many others
- 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

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). Implemented parts related to billing:

- tracking the consultation duration
- checking that the consultation can be continued: all members have alive connections, there is enough money to pay, etc
- making charges after the consultation is over

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 (most of the codebase was written by me)

BARS GROUP Novosibirsk, Russia

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

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

Java, Liferay, Tomcat, JSP, SOAP and Rest Services, Activiti Workflow Engine, MySQL.

Diasoft Novosibirsk, Russia

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

Support and development products from the banking sector.

Java EE, hibernate, maven, unit testing, different application servers (Oracle WebLogic, IBM WebSphere, Tomcat), different databases (Oracle, MS SQL)

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 master clean and always working
- using code reviews to share knowledge about the project and keep the implementation as simple as possible
- using a CI for running tests and deploying via a one-click button
- aiming to 100% tests coverage

EDUCATION

Novosibirsk State University (NSU) Novosibirsk, Russia

Master of Science (M.S.) 2010

Physics Department