

Ivan Volzhev

Lead Software Engineer/Architect

Technologies

Languages Java, Scala, Python

Cloud/Micro Services Amazon, OpenShift, Docker,

Kubernetis

Frameworks Spring, DropWizard, Guice,

Hystrix, Spark

DataStorage RDBMSes, ElasticSearch,

Redis, MongoDb

CI/CD Jenkins, Gitlab, Heroku

DevOps Bash scripting, Linux

Processes Agile, Scrum, Kanban, SDLC

Queuing Kafka, Amazon SQS,

ActiveMQ

Experience

Apr 2019–Present Lead Software Engineer, EPAM Systems, Krakow.

Working as Lead Software Engineer and later Team Lead for medical insurance company from

My team was part of agile release train which was creating ETL system supporting complex user defined transformations including dependency-tree based mapping of properties of arbitrary paths across the tree. We have developed following subsystems:

- o Module to support error reporting and managing retries, both automatic and manual. Source systems were able to send json describing action they attempted, result and set up the policy for retries. The module was to provide UI and backend to browse, correct and retry said actions.
- o Module to verify correctness of data transfer between heterogeneus datastorages, with main focus on comparing millions of rows of data between MongoDB and RDBMS (Oracle, DB2 and Postgress) with ability to extend to other kinds of data sources and to configure details of which columns should and should not be compared.

Achievements:

- o In cooperation with DevOps team alligned deployment of our components with the rest of the system. Made sure that Helm deployement works smoothly and is a one-button process.
- o Made possible automatic import of OpenShift provided certificates into java truststore on pod startup with no root access. Enabling pod-to-pod end-to-end ssl encryption with zero configuration.
- During business trip to client's office obtained knowledge on system, get to know key persons in the release train and shared this knowledge and connections locally improving communication.
- Managed cross-team support crew to cover the gap in testing support during USA night hours.
- o Organized retrospectives in the team to timely identify blockers and bottlenecks, and give recognition to the team for achievments.
- Together with other lead engineer selected addition to the team whom proved to be resourceful. Technologies: Rally, Confluence, Java, Spring, Maven, Docker, Kubernetis, Helm, MongoDB, gitlab, gitlab CI, Scala, gatling

Feb 2019–Mar 2019 Contract Software Engineer, Akvelon, Kharkiv–Remote.

While waiting for visa for EPAM Poland I joined Akvelon team in efforts to improve backend for instagram like platform focused on travels and stories.

Achievements:

- o By client's request migrated data and datastorage to Elastic Search 5.6.0
- o Introduced ES index and backend API changes to support geolocation in story in general and in particular frames of the story so story author can mark points of interests on the map.
- Implemented geolocation based search so users can find points of interests near them or particular location.
- Added backend support for newest iPhones allowing theme authors to optimize theme for particular aspect ratio.

Technologies: Hystrix, RxJava, Gradle, ElasticSearch, Redis, Heroku

Jun 2017-Dec 2018 Contract Software Engineer, Cool Company Skandinavien AB, Malmö.

Worked as part of the team creating large scale process to compose various sources of data into coherent map for one of the biggest software and hardware companies on the market. Team I was part of was mostly concerned with consolidating address data cross-checking several in-company and external sources of address data and providing other teams with tools to complete such comparison.

Achievements:

- Simplified and optimized code of Scala Spark job which was comparing sequential issues of US-wide address index to detect added or removed address point.
- Created custom dbf file format reader for Spark significantly reducing overhead in comparison to reading full OpenGIS data format.
- Integrated address comparison library created in the team into commonly used CLI tool allowing to execute library functions on given cluster and download results for non-programmer user.
- Packaged address comparison library in the form which could be used in the common workflow builder and created example workflow to illustrate usage to other teams.

Technologies: Scala, Spark, Gradle, Yarn, Protobuf, HDFS

Jun 2016–Jun 2017 Java Architect, Crossover, Tivat–Remote.

Worked to expand client's portfolio of tools for developers helping them to improve software quality, evaluate technical debt for software projects and build plans to deal with it. I was involved in two projects:

- o Service to keep track of test coverage, to create plans for the not covered parts and prioritize files or classes which will contribute most to the overall coverage. Also service allowed to export plan in a way Jira can import it and convert into tasks for respective class code owners.
- Service to keep track of test runs individual, per-class, and per-package successes, failures, run times, and other details.

Achievments:

- Received project from other team and make it pass SDLC quality gates making quality predictable and stable
 - On Commit CI/CD
 - Database changes stored in repository as alchemy changesets
 - Test coverage checks as part of CI/CD pipeline
- o Migrated project from Amazon Elastic Beanstalk to docker swarm
- \circ Implemented docker-compose based automatic tests in Java TestNG runnable from gradle as part of CI/CD

Tecnologies: Java, Spring, JMS, Docker, Gradle, Python, AngularJS, AWS, Amazon Beanstalk, Amazon RDS, Amazon S3, Amazon SQS

Aug 2014-Apr 2016 Expert Software Engineer, TomTom, Łódź.

Took a part in development of transactional map making system. I was working on improving the performance of automated map quality assurance process, making possible to run checks for big regions of the world in a reasonable time.

Achievments:

- Proposed and implemented feature to allow quality assurance rules to specify what data do
 they need to download from the map and what is the depth of recursion required depending
 on the type of the association limiting bandwidth and memory usage during the run.
- Come up with the methodology of the performance testing based on queueing theory and way to use Little's rule to explain performance results of the QA runs
- Created component to distribute QA run over several nodes, improving paralelism and reducing runtime. This component was also reused by other teams proving good design and reusability.
- Under my supervision other developer created automatic system to start AWS CloudFormation Stack, run performance tests and collect results with extensive metrics making it easy to asses performance changes after optimizations.

Tecnologies: Java, Spring, PostGIS, PostgresSQL, R,

Feb 2013-Jul 2014 Senior Software Engineer, GlobalLogic, Kyiv.

I was working in a team creating BMC MyIT product which is tool for automating IT support infrastructure including automation of processing service requests, assets management, appointments and knowledge bases.

Achievements:

- o Implemented cross-platform installer of the system
- Designed and implemented JBehave based system allowing QA team or even stakeholders to write executable User Stories
- Superwised developer who was extending steps for QA team
- Implemented appointment scheduling functionality for MyIT

Technologies: Java, Spring, EclipseLink, Maven, PostgerSql, Oracle, VDI

Jul 2012–Dec 2012 **Software Architect**, Extracode, Kyiv.

Designing and developing Azure based cloud application based on ASP.NET(C#) with MVC4 framework. Functionality of the application was to collect data about natural gas sales from local branches and process this data according to laws and regulations. As this area is strongly regulated the application was required to generate extensive reports for regulatory commission and also keep accounting for gas traders.

Technologies: Azure, Azure SQL Server, NHibernate, log4net, Autofac, MVC4, jQuery

Oct 2009–Jul 2012 Senior Software Engineer, 4shared.com, Kyiv.

4Shared.com is a widely used file-sharing service with millions of page impressions per day. During my employment on 4shared I was involved in improving the service.

Achievements:

- Implemented highly requested features such as assigning domain names to files, document previews, download all or selected files as archive
- o Improved 4shared SOAP interface to support desktop client changes
- Integrated OAuth into SOAP and REST interfaces allowing to integrate third-side clients with 4shared
- Took over 4Shared Desktop package for Mac and Linux from outsourced vendor and packaged it for easy installation. Further improved the deskop client.
- Developed mass email sendind subsystem
- o Implemented image previews and compression on upload
- o Implemented API to track installs/uninstall of b1 archiver tool
- Implemented use of Redis for non-critical caching tasks

Technologies: Java, MySQL, hibernate, log4j, memcached, Redis, jQuery, tomcat, RESTful

Apr 2006–Apr 2009 .NET Developer, Architect, TechnolnfoService, Kyiv.

Development and design of several projects.

- Indoor Video Software system for management and demonstration of advertisements on screens in public places. e.g. supermarkets, restaurants, etc. System was divided into 3 parts - Video Player, Order Management system and an offline playlist management tool, that did not require a permanent internet connection..
- Equipment Inventory management system for electricity selling companies. The system recorded the whereabouts of electricity meters (whether they are installed at a customer's place or are storedin a warehouse) and their readings.
- Utility CRM system for electricity selling companies to manage private clients. The system implemented different models of direct and indirect payment calculation methods.

Technologies: C#, WinForms, Microsoft SQL Server, Active X, Windows Media subsystem, DevExpress controls

2005–2006 .NET Developer, Art-master, Kyiv.

I took a part in state law enforcement records management system development. Oracle queries optimization, rtf templating engine.

Technologies: C#, WinForms, Oracle

2003–2005 **PL/SQL Developer**, *UBIS*, Kyiv.

I took part in the development of railway ticket booking system for Ukrainian Railways. My responsibility was to create a system that could search existing trains, find suitable ones, book tickets according to buisiness rules. In addition I took care of inter-system communications and increasing stability of applications server. Some parts of logic were written as PL/SQL stored procedures, others were in Delphi application server.

Technologies: Delphi, Oracle, PL/SQL

Education

2000–2007 **Master Of Science**, *National Technical University of Ukraine 'Kyiv Polytechnic Institute'*, Kyiv.

Languages

English B2+ As assessed by in-house interview

Russian Native

Ukrainian Native

Polish A2+

German A1 learning

Interests

Tourism Travelling to new exciting place is my long term passion which combines nice with next

Motorcycling, sailing, Various kinds of moving around are wonderful ways to spend vacation flying, skiing

Computer games When not engaged in traveling I tend to spend time at home either playing games or Dancing Various dances, mostly lindy hop and blues last years.