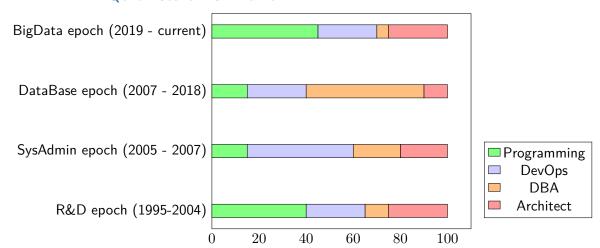


Sergey Kryazhevskikh

System Architect and Software Engineer

BigData Engineer. System Architect. DevOps. Software Developer. Research Engineer. DataBase Administrator.

«Quick start» CV review



Certification

Scala Scala-ReactiveX: Programming Reactive Systems: 2021

BigData Yandex Big Data Specialization:

Big Data Applications: Real-Time Streaming: 2020 Big Data Applications: Machine Learning at Scale: 2019

Big Data Analysis: Hive, Spark SQL, DataFrames and GraphFrames: 2019

Big Data Essentials: HDFS, MapReduce and Spark RDD: 2019

OCP Oracle Certified Professional: 2015 - 11g, 2012 - 9g

OCA Oracle Certified Associate: 2008 - 9i

Linux Novell Certified Linux Administrator: 2010, Linux Professional Institute, LPI-I: 2008

Education

1995–1998 Research Engineer, Vyatka State University, Kirov, Higher professional.

Postgraduated study in "Automatic control systems"

1990–1995 **Engineer**, *Vyatka State University*, Kirov, *Higher*.

Diploma with honors in "Electronic-Constructor-Technologist Engineer of electronic computing systems"

Experience

Actual valid skills

2020–current **Senior BigData Engineer**, *«BIA Technologies» LLC*, St. Petersburg (remotelly), Russia.

Design, deploy and maintain on-premise Hadoop based cluster. Development business software applications used Spark, Kafka and more.

Detailed achievements:

- Technical Leader
 - Popularization of a wide range of open-source technologies in the company: holding seminars and training courses
 - Conducting graduation projects of students
 - Writing wikies and technical documentation: Sphinx-doc

IT Architecture

- System architecture desing of Hadoop based DataLake
- Migration data storage paradigm: from DataWareHouse and DataLake to LakeHouse
- Desing and implementation of streaming processing subsystem: Kafka, Debezium,
 Spark Structured Streaming, Delta-tables
- Desing and implementation of a data ingestion subsystem: Airflow, Celery, DASK
- Hadoop and Kubernetes integration
- Desing and implementation of a data governance and data lineage subsystem: LinkedIn DataHub, Apache Atlas
- Design and implementation of a data quality and data assurance subsystem: Great Expectations, Apache Griffin
- Desing and implementation of data virtualization subsystem: Trino; DWH intergation: PolyBase
- Desing of data orchestration subsystem: Alluxio

Software development

- Developing of Kafka connectors on Scala and Python
- Developing of streaming storage table model based on Delta-tables (delta.io) on Scala
- Developing DAG factory and DAGs for Airflow
- Developing buisiness models for realtime data processing using Pandas, DASK, pySpark

o Data Bases

- Participation in projects for MS SQL Server
- Integration cluster PostgreSQL with Hadoop: Patroni
- DevOps and System administration
 - Maintain on-premise Hadoop clusters
 - Implement DevOps techniques to support Hadoop clusters: Ansible, GitLab
 - Developing own Annible roles, Ansible and GitLab integration
 - Migration of production Hadoop cluster from Hortonworks Data Platform to vanilla Hadoop
 - Docker Swarm and Hadoop integration: Portainer
 - Implementation of monitoring system for Kafka and Hadoop: Prometheeus, Grafana, AlertManager, ElasticSearch, Filebeat, Kibana

Perm – Russia

2018–2020 Chief Software Developer, «PIT» LLC, St. Petersburg (remotelly), Russia.

Process management, architecture design, software development in one gas and oil industry project

Detailed achievements:

- Technical Leader
 - Technical leading and small team management: 5-12 developers
 - Project management with Jira, Trello, Ora.pm
 - Scumban implementation
 - Scrum Pocker implementation
 - Endorse team startup spirit
 - Project planning: MSProject, GanttProject, TaskJuggler
 - Implement test-based release management aproach
- IT Architecture
 - Desing and implementation of Hadoop-based calculation cluster: Hadoop HDFS/YARN. ZooKeeper, Spark, Hive, Kyuubi Thrift JDBS/ODBC Server, Alluxio
 - Architecture desing for a distributed calculation subsystem to migrate from Oracle
 - System architecture desing for all software components of the projects
 - Participation in technical meetings with customers, writing technical documentation
- Software Development
 - Planning in Jira, modev to Ora.pm
 - Writing Oracle PL/SQL packages
 - Reengineering Oracle PL/SQL packages for a Spark standalone cluster
 - Migration Oracle Model code to PySpark/Spark-SQL and Pandas
 - Implement testing environments: pytest, Postman, Postwoman, Apache JMeter, Taurus/BlazeMeter, Selenuim
 - Participation in the projects on C-sharp
 - Implementation of DevOps techniques: Gradle/Groovy, LiquiBase, Jenkins Pipeline, GitLab Pipeline, Bash, Shell, PowerShell scripts

2018–2020 **Chief Software Developer**, *«PIT» LLC*, Continue.

- Oracle DBA
 - Maintain Oracle RDBMS for datawarehouses and business analytic systems
 - Analyzed and tuned Oracle database perfomance
 - Used statistical language R for a historical perfomance analysis of an Oracle RDBMS
 - Installed and maintained database monitoring system: Oracle Enterprise Manager, Oracle dbConsole
 - Optimized SQL-query
 - Analyzed and tuned Linux servers perfomance for Oracle RDBMS
 - Analyzed and tuned AIX servers perfomance for Oracle RDBMS
- DevOps and System administration
 - Implement Infrastructure-as-Code paradigm: Chef
 - Implement CI/CD: Jenkins, GitLab
 - Migration development environment from Bitbucket, TeamCity to GitLab, Jenkins
 - Implement monitoring system: Influx DB, Grafana, Telegraf, Kapacitor
 - Dockerize company's IT infrastructure: Docker Swarm, Portainer

2017–2018 **Senior Consultant and Software Developer**, *«IBS» LLC*, Moscow (remotelly), Russia.

Architecture design, software development and maintanance of a large information systems. Detailed achievements:

- IT Architecture
 - Desing and implementation of a fault-tolerant application cluster
 - Participation in technical meetings with customers, writing technical documentation
- Software Development
 - Planning in Jira
 - Developing Oracle PL/SQL packages
 - Developing Oracle BI forms
 - Participation in the projects on Java
- Oracle DBA
 - Maintain Oracle RDBMS for datawarehouses and business analytic systems
 - Analyzed and tuned Oracle database perfomance
 - Installed and maintained database monitoring system: Oracle Enterprise Manager
 - SQL-query optimization
 - Analyzed and tuned Linux servers perfomance for Oracle RDBMS
- DevOps and System administration
 - Maintain a broad portfolio of services: Oracle RDBMS, Linux servers, Oracle Weblogic, Oracle BI, Oracle Access Manager, Oracle Unified Directory, Corosync/Pacemaker, Apache Tomcat, Apache SOLR, Apereo CAS, Apache HTTP server, Nginx
 - Implement testing and monitoring environment: LXD, OpenStack, Juju, GitLab, Jenkins, Zabbix
 - Endorse of DevOps techiques: Ansible, Juju, Puppet
 - Desing and implementation of high loaded fault-tolerant clusters for business Java application: Corosync/Pacemaker, Nginx, Memcached, Apache Tomcat
 - Building failover load balancing cluster for Oracle BI: Oracle Weblogic
 - Implement LifeRay clusterization with EhCache distibuted cache.
 - Implement LifeRay cluster SSO using Apereo CAS with Kerberos for Windows/Linux workstations

Fundamental skills

2014–2017 **Leading Software Developer**, «Pro IT» LLC, Perm, Russia.

Architecture design, software development and maintanance of a middle level information systems

Detailed achievements:

- WriteMe
 - Planning in Jira
 - Developed a data model to store data of various data sources, developed PL/SQL package interface for the data model: Oracle PL/SQL, Oracle DataModeler
 - Developed ETL-loaders: Talend Open Studio, Java
 - Developed specialized ETL-loaders using Oracle PL/SQL and Talend Open Studio for different kind of data sources: CSV, XML, Excell files, Internet services
 - Developed analytic reporting modules: Oracle analytic SQL, recursive SQL
 - Participation in the projects on PHP
- Oracle DBA
 - Analyzed and tuned Oracle database performance
 - Installed and maintained database monitoring system: Oracle dbConsole and Oracle Enterprise Manager
 - Optimized SQL-query
 - Analyzed and tuned Linux servers perfomance for Oracle RDBMS
- DevOps and System administration
 - Maintained XEN virtual servers for application testing purposes
 - Deployed the Decentralized Monitoring System using Oracle dbConsole, XMPP/Jabber
 - Deployed the Remote Server Configuration and Control System using Puppet and Foreman
 - Designed an infrastaructure for automatic deploying ETL tasks: JobScheduler, incron

2013–2014 **Leading Software Developer**, «*Prognoz*» *CJSC*, Perm, Russia.

Develop banking analytic systems, ETL-loaders for Teradata datawarehouse. Detailed achievements:

- WriteMe
 - Developed ETL-loaders for Teradata data warehouse: Teradata SQL
 - Maintained ETL tasks for Teradata data warehouse: Informatica
 - Developed analytic reporting modules: Teradata analytic SQL, recursive SQL
- Oracle/Teradata DBA
 - Analyzed and tuned Oracle database perforance
 - Analyzed Teradata database perfomance: Query Captiring Database (QCD)
 - Created SQL-query analyze methodology using Teradata System Emulation Tool (SET)
 - Installed and maintained Teradata Express on Linux virtual servers
 - Supported testing environments: data export/import with Teradata BTEQ and Fast-Export/FastLoad utilities
- DevOps and System administration
 - Maintained XEN virtual servers for application testing purposes
 - Installed and maintained Teradata Express on Linux virtual servers
 - Supported data export/import with Teradata BTEQ and FastExport/FastLoad utilities

2007–2013 **Senior Database Administrator**, *«ER-Telecom Holding» JSC*, Perm, Russia.

System engineering, deploy and maintain Oracle RDBMS and Linux servers of a Billing and Business Analytic systems.

- Team Leader
 - Team management: about 3 DBAs
 - Interaction with other company's departments
- IT Architecture
 - Designed central warehouse for database statistics, collected data from more than 200 Oracle databases
 - Developed statistical principles for a historical perfomance analyzing of an Oracle RDBMS with R language
 - Desined and deployed the backup strategy for Linux servers and Oracle databases: Bacula, Oracle RMAN, exp/imp, Oracle DataPump
 - Migrated Oracle databases into SAN environment: EMC VNX, IBM XiV. Deployed ASM instances, Oracle ClusterWare nodes. Tuned SAN multitier architecture with SSD-disks for Oracle RDBMS
 - Designed a fault tolerance strategy for the Billing System: Oracle standby, Oracle DataGuard, Oracle GoldenGate
- Oracle DBA
 - Maintained the Billing System in 24x7: more than 200 Linux servers and Oracle database instances
 - Designed analyzing and tuning regulations for a high loaded Oracle databases: Wiki pages in Mediawiki, Redmine, Confluence
 - Used statistical language R for a historical perfomance analysis of an Oracle RDBMS
 - Analized and tuned SQL gueries: Oracle Outlines, SQL Profiles
 - Designed and deployed the Central Datawarehouse for an Oracle Business Intelligence (BI)
- DevOps and System administration
 - Maintained more than 200 Linux servers and Oracle RDBMS instances
 - Designed server configuration and deployed Puppet automation tool
 - Builded rpm- and deb- packages
 - Deployed a Jenkins continuous integration system for packaging and testing
 - Designed and deployed the Decentralized Monitoring System using Oracle dbConsole, MMONIT, Jabber/XMPP
- Software Development
 - Developed software for code installation support into Oracle RDBMS: PL/SQL, Shell
 - Developed software and scripts for every day DBA tasks: user and object audit, database monitoring, control statistics gathering, control of database users

2006–2007 **Leading System Engineer**, «Permenergo» JSC, Perm, Russia.

Maintain enterprise computer-based systems.

Detailed achievements:

- Oracle DBA
 - Maintained Interbase RDBMS for the Enterprise Rresource Planing (ERP) system
 - Migrated the ERP into FireBird database
 - Migrated the ERP into Oracle database
 - Deployed an Oracle 9i RDBMS instance for x86_64 Debian GNU Linux
- DevOps and System administration
 - Maintained and supported users and servers into Microsoft Active Directory
 - Designed fault tolerate enterprise mail system: Debian GNU Linux, Postfix MTA, Sieve, Cyrrus IMAP, Kaspersky AntiSpam:
 - SPAM and viruses filtration
 - Designed regulations for archiving enterprise mail
 - Designed traffic balance of mail system. Audited mail traffic.
 - Designed fault tolerate mail system using Linux/VServer and ipvs
 - Designed regulations for backup of databases and application servers
 - Maintained Oracle RDBMS for Solaris on SunFire servers
 - Developed VisualBasic scripts to implement AD domain policy
 - Developed shell scripts to control and monitor Linux servers

2006–2008 Leading System Engineer, Regional Multipurpose Library named after Maxim Gorky, Perm, Russia.

System administration and maintainance for enterprise computer-based systems. Detailed achievements:

- Maintained Microsoft Active Directory domains.
- o Designed and deployed the Enterprise Mail System: Postfix MTA, Sieve, Cyrrus IMAP, Kaspersky AntiSpam, Squirrel
- o Desined and deployed a backup strategy for databases and application servers
- Supported diskless work stations
- o Migrated enterprise services from Microsoft Active Directory to Novell eDirectory

2004–2006 **Design Engineer in Electronics**, Scientific and Technical Center «SIMOS» CJSC, Perm, Russia.

Develop monitoring system for telecommunication devices.

- o Developed complete monitoring system for telecommunication devices produced by company
- Disigned an embedded multipurpose real-time monitoring system for Atmel AVR microcontrollers by means of XMK open source project: C and WinAVR
- o Developed GUI monitoring application for Windows: Python, wxPython, wxWidgets
- o Designed embedded progammable modules for line wired telecommunication.
- Designed a schematic circuit diagrams: AutoCad
- Designed a working construction documents: AutoCad

1995–2004 Leading Software Developer, «Otdelenie Razrabotki System» JSC, Kirov, Russia. WriteMe

- o Deployed PostgreSQL and MySQL RDBMS as an archive storage system in real-time monitoring and control systems
- o Seted out the framework and standards for big data processing in real-time control systems
- Designed Linux-based embedded systems
- o Deployed and supported Linux servers for internet and intranet: WWW, MAIL, FIDO, FTP, etc
- o Designed real-time control system for embedded x86 controllers: C, Assembler
- o Developed fuzzy controler and PID controller for heat power engineering objects
- o Designed the distributed SCADA (System Control and Data Aquisition) system: C, Perl, Tcl, Java, InfoBus, XML/BML/RDF
- Participated in designing of a programmable logic controllers (PLC)
- Designed a schematic circuit diagrams: PCAD
- Designed a printed circuit boards: PCAD
- Designed a working construction documents: AutoCad
- o Developed and deployed the Fuzzy Control System in energetic operating companies
- o Devloped a fuzzy control algorithm for embedded x86 programmable logic controller: C,
- Researching efforts in knowledge based systems with Prolog, CLIPS, FuzzyCLIPS

Languages

English Intermediate Good reading and writing in English in the scopes of activities, a few

practice in spoken English

German Basic Basic level of reading in German

Computer skills

Network TCP/IP, DNS, DHCP, LDAP Docs DoxyGen, Sphinx, LATEX

Software Dev C, Tcl, Perl, Python, Shell, OS Windows Server, Linux, FreeBSD, CVS. Git. Subversion, Bazaar. Solaris

> Automake, Autoconf, Gradle, Liquibase, (C-sharp, PHP, Java,

Scala)

RDBMS Oracle, Teradata, PostgreSQL, DevOps OpenStack, Juju, Foreman, Chef, MySQL, Interbase, FireBird Puppet, Ansible, Fabric, Active

Directory, eDirectory

Oracle Oracle BI 11g, Oracle Access Manager, Oracle Unified Directory, Oracle Internet

Services Directory, Oracle Weblogic

BigData Hadoop HDFS, YARN, Spark, pySpark, Spark-SQL, Hive, LLAP, ZooKeeper, Kafka, Ambari, HBase, Sqoop, Pandas, Kyuubi, Atlas, Trino, Kudo, Airflow, GreatExpecta-

tions, Apache Griffin, Debezium, Kubernetes, DASK, Celery, Redis

Interests

Hiking trip Summer and winter hiking and skiing trips

Kayaking Kayaking and water trips

Astromomy Amateur of astronomy

Folklor Singing russian folk songs, playing russian folk musical instruments

Linux, Open Open source project participating, Linux popularization Source

Additional information

- o Preferred desktop OS: Ubuntu/Debian Gnu Linux
- o Preferred text editor: Vim, VisualStudio Code
- Preferred typesetting: LATEX
- System approach to problem solving, Critical thinker and problem-solving skills
- o Educability. Self-directed and self-motivated with the ability to take charge or play a supporting role