Alexander Bessonov

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Skills

Actor Model
Akka
Apache HBase
Apache Hadoop
Apache Kafka
Apache Spark
Asynchronous Programming
Automation
Business Analysis
Business Intelligence
CI/CD
Data Analysis
Data Integration
Data Mining
Data Quality
Data Warehousing
Database Performance Tuning
Databases
ETL
Git
Graph Processing
Logical Data Modeling
Machine Learning
Natural Language Processing
NoSQL
Python
R
Reverse Engineering
SQL
Scala
Teradata
Text Mining

Education

Moscow Power Engineering Institute (Technical University)

Master's degree: Electronic Systems 2006
Thesis Topic: Automatic number plate recognition.

Additional Coursework

Machine Learning
Data Analysis
Statistics
Computing for Data Analysis
MongoDB for Developers
Natural Language Processing
Image and Video Processing
Social Network Analysis
Credit Risk Management
Computational Investing
Real-Time analytics with Apache Storm
Data Visualization and D3.js
Functional Programming Principles in Scala
Principles of Reactive Programming
Algorithms

- Technical Lead for multiple client-facing projects.
- Presenter at Teradata conferences and Data Science user groups.
- Certified Teradata Solutions Developer.
- Experienced in performance tuning, physical data modeling, data cleansing and data visualization.
- Received appreciation and recognition award from Fortune 500 company.

Employment

Bloomberg L.P.

Big Data Engineer — Oct 2016 to Current
- Developed a Distributed Trace system.
- Pioneered the use of Spark's Structured Streaming within the company and shared the experience on internal meetups.
- Implemented a Docker-based integration testing framework for Continuous Integration.
- Designed and Implemented in Python a watchdog service for 24/7 monitoring of the Spark Streaming jobs.
- Onboarded and mentored new team members making an expanded team efficient in a short amount of time.
- Implemented an async Python HBase client library.
- Standardized the Continuous Integration pipeline to improve team's code quality.

Credit Suisse (via Syntel)

Data Scientist/Data Engineer — Apr 2015 to Oct 2016
- Built and deployed models to forecast various time-series data.
- Led development of HBase-based graph database and RESTful microservices utilizing the database and Cloudera Search (Solr).
- Led development of streaming graph visualization web app (based on D3.js, Sigma.js and Oboe.js).
- Designed and implemented entity resolution algorithms and frameworks for SNA project using Apache Spark GraphX.
- Implemented R and Python packages to help data analysts to obtain required data.
- Implemented frameworks to run R and Python code on Hadoop cluster.
- Implemented web scrapers for structured and semi-structured data.
- Deployed several external data acquisition pipelines.

EXL Service

Manager, Decision Analytics — Jul 2014 to Apr 2015
- Developed complex Alteryx analytic application to model Return on Advertising Spend using Alteryx, R and Tableau.
- Implemented report generation framework.
- Performed text-mining on insurance claims data using Revolution Analytics R and Python.
- Developed streaming data processing pipeline in Python.

Teradata

Advanced Analytics Consultant — Jul 2011 to Jul 2014
Data Analytics Projects
Technical presales consultant for Teradata data analytics solutions: Teradata Aster, Teradata in-database analytics using R.
- Implemented several Proof-of-Concept solutions, some of which led to sales, for different customers:
  - Market basket and customer behavior analysis for retail customer;
  - Text mining in social network for credit scoring and bank's customer segmentation;
  - Telco's subscriber segmentation algorithm using statistical computing language (R) and in-database calculations on Teradata.
- Organized internal knowledge-sharing sessions to advocate data analytics products and possible catch-points within the organization.
- Revived the Teradata's in-database analytical solution (teradataR) by fixing and updating its code.
- Reverse-engineered and documented telco's legacy code for churn prediction solution using Neo4j graph database.
Multiple Data Warehouse implementation projects
Client: Sberbank, Russia
- As part of a Master Data Management (MDM) initiative, replaced a set of scattered, manually executed scripts with an automated process to improve data quality by addressing communication bottlenecks and execution errors with the manual process.
- Spearheaded implementation of MDM migration project growing Teradata recognition along with bringing additional $200k in revenues.
- Automated data quality reporting by re-implementing Data Quality Management (DQM) solution.
- Maintained ERwin data model for MDM solution.
- Made changes to physical database design to improve query performance.
- Implemented stored procedures based framework for DQM.

Accenture

Senior Programmer → System Analyst → Senior System Analyst — Feb 2007 to Jun 2011
Client: Intesa Sanpaolo, Russia
- Assigned as an Application Developer for newly introduced banking system, quickly gained necessary knowledge to successfully lead a team of five developers to implement a new system.
- Migrated data from legacy banking systems to the new solution and achieved significant improvements in system performance by optimizing queries and tuning databases to handle the increased data volumes.
- Worked with system's users to collect requirements and translated them into Statements of Work that were later implemented as product features by my team.
- Designed a set of frameworks to integrate new banking system with WebSphere MQ which resulted in a unification of the project's code base and decreased code complexity which further increased system performance.

Rosbank (Societe Generale Group)

Programmer — Nov 2005 to Jan 2007
- Developed several C and Pascal applications for Mysis Equation core banking system.

Personal Projects

- Designed and implemented data analytics architecture for an antifraud project using Python OLAP framework, Neo4j and PostrgreSQL.
- Contributed to OSS projects.
- Implemented several web-scrapers to extract media resources, user profile information, product prices, URLs etc.
- Reverse engineered and re-implemented UDP-based protocol used to communicate with video surveillance equipment.