Vladislav Belogrudov

Software development professional with a diverse project experience
and a passion for innovation and new technologies

SUMMARY OF QUALIFICATIONS

- Deep expertise in cloud computing and big data processing.

- Solid knowledge of storage systems, networking and virtualization.

- 20 years working closely with Linux/UNIX systems, designing, developing, testing and maintaining software systems.

- Variety of roles - manager, developer, QA engineer, lecturer.

- Excellent communicational skills, can take responsibility for projects and teams.

- Creative, eager to learn new things, to do challenging tasks, goal-oriented.

- Python, C/C++, Go, R, Java, Ansible, Docker, Kubernetes, variety of other languages and tools.

PROFESSIONAL EXPERIENCE

Oracle Development SPb, Russia   September 8, 2014 - current
Principal Software Developer, Software Development Manager

- Leaded development of the first commercially available OpenStack implementation completely packaged as Docker instances.
- Designed and implemented Oracle OpenStack features:
  - containerized OpenStack services
  - automated deployment via Ansible
  - implemented online update, high availability and scalability
- Integrated MySQL Cluster into Oracle OpenStack distribution to provide A/A database backend.
- Managed Oracle OpenStack QA team:
  - created test plans, took responsibility for the release quality
  - provided critical bugfixes for Oracle OpenStack and upstream project
  - facilitated communication between product management, development, QA and release support

- Since 2018, managed QA automation teams:
  - Oracle Cloud (development testing)
  - Oracle Linux distribution testing
  - Kubernetes testing and test automation, CI/CD
- Actively contributed to OpenStack Kolla project: design ideas, feature implementation, code review and bug fixes, Stackalytics.
- OpenStack Summits talks:
  - High Availability with MySQL Active/Active Clustering
  - Containers - Silver Bullet for OpenStack Deployment?

Cork Institute of Technology, Ireland   September 2, 2013 - September 1, 2014
Senior Research Fellow, Lecturer

- Developed cloud-based software solution for next generation diagnostics in infectious diseases - `www.cloudxi.eu`. Designed and implemented highly scalable distributed and parallel processing bioinformatic systems (capable to process extremely large genome sequences). Implemented load-balancing of bioinformatic workflows among servers, designed management layer to abstract bioinformatic tools execution. Intensively used XenServer, LXC, Python web services.
- Evaluated Hadoop, VMware ESXi, Hyper-V, XenServer and OpenStack to build bioinformatic services.
- Designed and developed Hadoop based solution to parallelize NCBI BLAST to make search in extremely large nucleotide and protein databases.
- Installed and configured hardware and software systems for research laboratory - servers, networking, many bioinformatic tools.
- Developed and taught Distributed Data Management course to Data Analytics students. Main topics covered in the course are Big Data, NoSQL databases, Hadoop, Python and R streaming in Hadoop.
- Supervised student projects (Big Data and Hadoop).
- Supervised networking labs (Cisco).

EMC, Saint Petersburg, Russia   May 26, 2008 - August 16, 2013
Principal Software Engineer

- Designed and developed automated test framework for CSX (Common Execution Environment - technology and components for creation of platform independent Data Path software).
- Developed Data Path components for EMC VNXe storage systems.
- Prepared and conducted seminars on storage technologies, virtualization and cloud computing to colleagues and students at Saint Petersburg universities.

- Mentored student projects (storage and retrieval of images in Atmos cloud, approximate search engine, approximate file system deduplicator, virtual cloud building, cloud workload balancing).

- Programmed in C/C++ and Perl.

- Lectured at Saint Petersburg Computer Science Center (Information Storage and Management course) - www.compscicenter.ru,
  lectures are made public at Lektorium.

Motorola ZAO, Saint Petersburg, Russia   February 20, 2006 - May 25, 2008
Senior Software Developer, Project/Team Leader

- Designed and developed several components of Access Point for WiMAX network, programmed DHCP, ICMP, ARP, Mobile IP, link managers. Wrote requirements and software architecture documents.

- Leaded Access Point Test Environment development team - organized work, communicated with customers.

- Prepared and held seminars "Mobile IPv6", "Secure Programming in C/C++", "Robust Header Compression".

- Participated in hiring activities, conducted technical interviews (as expert for C/C++ and UNIX/Linux development).

- Mentored and consulted colleagues in areas related to UNIX/Linux development, C/C++ and networking.

exorbyte GmbH, Konstanz, Germany   January 1, 2004 - December 31, 2005
Senior Software Developer for Approximate Search Technologies

- Developed, integrated and supported MatchBox and MatchMaker - approximate search and matching solutions for structured data providing exceptional matching quality and ultra-fast approximate multi-field search.

- Added UTF-8 support to MatchBox and MatchMaker (search through multilingual fields, sentences, character mappings and expansions).

- Designed and developed MatchMaker's license server - allowing for secure communication between system components, different licensing modes (performance share and accounting), mobility (host independent licensing), intellectual property protection (based on hardware keys).

- Programmed hardware keys (from WIBU SYSTEMS), designed and developed various software metering and protection solutions.

- Ported MatchBox and MatchMaker suite to Linux and Sun Solaris Platforms, was responsible for complete development process on UNIX platforms (design, coding, testing, builds, integration, consulting).

- Designed and developed project build system in TCL with support of hierarchical dependencies check and compilation of Java and C++ projects.

- Configured and administered Intranet, Linux and Solaris workstations, NFS, YP(NIS), DNS, other system and network services.
- Programmed in C, C++, TCL/TK and Bash.

SchlumbergerSema, Germany   March 1, 2001 - December 31, 2003
(in past Sema-Telecoms, LHS, now - Ericsson, Frankfurt am Main),
Software Engineer at Release Support Center for Billing Systems Solutions.

- Second and third level support of Business Support and Control System (BSCS), from version 5.10 to 7.00.
- Debugged, tuned and customized billing kernel of BSCS.
- Solved many severe problems of GSM operators, fast and reliably.
- Ported BSCS processing chain to HP Itanium 2 platform.
- Worked with many UNIX operating systems, compilers, debuggers and tools.
- Programmed in C and C++, Oracle Embedded SQL.

University of Karlsruhe, Germany   October 1, 1998 - February 28, 2001
Researcher at Institute for Process control and Robotics.

- Simulated work of an industrial robot with help of CAD/CAM system "RobCAD".
- Modeled workcells and connected simulation software with the control system of the robot.
- Worked closely with SGI IRIX and Linux Systems for the design and implementation of a multi-agent control system for robot cells (in C++). Used CORBA for interconnection of components. This work is fully described in "Rembold, Derk: Kommisioniersystem mit automatischer Zuordnung von Greifwerkzeugen für die flexible Handhabung von Objekten. CGA-Verlag, 2001. ISBN 3-89863-028-5".
- Programmed user interfaces with TCL/TK.
- Visualized the robot cell and programmed other applications with OpenGL.
- Integrated laser scanner into the robot cell.
- Worked on strategies of manipulation of unknown objects with different types of grippers.
- Was involved into the research project DIAMOND (Distributed Architecture for Monitoring and Diagnosis) that was founded by European Commission. Project was related with diagnostics of robots.
- Implemented part of a distributed multi-agent architecture in Java (database interface for DIAMOND).

EDUCATION

September 1, 2011 - October 23, 2013
>**Cork Institute of Technology, Ireland**
>Master of Science in Cloud Computing, First Class Honours. Attended courses - Software Engineering, Scripting (VMware vSphere Perl SDK), Management of Virtual Environments (vSphere), Cloud Strategy Planning and Management, Computing Research and Practice, Data Centre Networking, Cloud Security, Cloud Storage Infrastructures. Diploma thesis - "Tenant Behavior-driven Scheduler in OpenStack Cloud".

April 30, 2007 - October 23, 2007
>**Project Management Institute, Saint Petersburg Chapter, Russia**
>Postgraduate studies of Project Management (ANSI PMBOK). Attended courses - Project Management (Scope, Integration, Schedule, Quality, Communication, Procurement, Human Resources, Cost, Risks), Quality Management (Planning, Assurance, Control).

October 1, 1998 - February 28, 2001
>**Institute for Process Control and Robotics, University of Karlsruhe, Germany**
>Exchange student and researcher. Research and development in area of industrial robotics.

September 1, 1993 - October 15, 1999
>**Saint Petersburg State University of Aerospace Instrumentation, Russia**
>Diploma Engineer in Robotics (Master), Control Systems for Robots and Complex Robot Cells. Key courses: electrical engineering, applied mechanics, design and modeling of robot systems and microprocessor control systems.

ATTENDED COURSES

- Java Programming, O'Reilly School of Technology.

- Many EMC and storage technology related trainings (Celerra, Clariion, Virtualization, Information Storage and Management).

- Motorola provided courses - Secure Programming, Productivity Measurement Systems, Record Management, Behavioral Interviewing, Unified Modeling Language, Six Sigma Foundations, Project Management Workshop for Project Leaders.

- Oracle SQL Optimization, by Oracle.

- C++ Advanced Course, by Kölsch & Altman, Software & Management Consulting GmbH.

- Rational Purify for Unix, by Rational.

- Coursera Courses:

    - C++ Yellow Belt by Moscow Institute of Physics and Technology & Yandex

    - C++ White Belt by Moscow Institute of Physics and Technology & Yandex

- Databases by Saint Petersburg State University
- Algorithmic Toolbox by by University of California San Diego & National R esearch University Higher School of Economics
- Data Structures by University of California San Diego & National Research University Higher School of Economics
- Dive into Python by Moscow Institute of Physics and Technology & Mail.Ru Group
- Graph Theory by Moscow Institute of Physics and Technology
- An Introduction to Probability Theory by Moscow Institute of Physics and Technology
- An Introduction to Combinatorics by Moscow Institute of Physics and Technology

PUBLICATIONS

- A. O'Driscoll, V. Belogrudov, J. Carroll, K. Kropp, P. Walsh, P. Ghazal, R. Sleator. HBLAST: Parallelised sequence similarity - A Hadoop MapReducable basic local alignment search tool. In *Journal of Biomedical Informatics*, April 2015

- D. Rembold, V. Belogroudov, T. Längle, and H. Wörn. Automatic selection of grippers for object handling. In *AMS 2000*, Karlsruhe, Germany, November 2000.

- D. Rembold, V. Belogroudov, and H. Wörn. Object turning for bar code search. In *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems*, Kagawa University, Takasamatsu, Japan, November 2000.

LANGUAGES

English - fluent, German - can read and speak, Russian - native

The most actual version of this document can be found here.