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SOFTWARE DEVELOPMENT MANAGER

OBJECTIVE

To get a challenging position of software development manager which will utilize and further develop my skills and knowledge.

SUMMARY

- Software development manager with 19 years of industry experience.
- Organizing multiple competing projects and priorities.
- Excellent communication and interpersonal skills, working with technical and business teams, influencing senior leadership.
- Ownership of multiple initiatives, creation and maintaining timelines, tracking risks and costs.
- Expertise in leading high-performance teams, building team-oriented culture, managing performance, grow their careers, mentorship and coaching.
- Deep understanding of agile methodologies and teamwork.
- Full software development life cycle – from concept to launch in production.
- Excellent decision making and problem solving skills.
- Leadership in technology and engineering, building complex software systems.
- Expert knowledge in software development best practices, establishing coding standards, code reviews, continuous integration and deployment, quality standards.
- Following modern technologies, platforms and solutions including Open Source projects.
- Analytical, design and architecture skills.
- Building high performance scalable software, distributed systems.
- Experience in many modern languages in Linux and Windows environments.

TECHNICAL SKILLS

Deep understanding of principles necessary to create robust, secure, scalable software systems;

Programming languages: C, C++, C#, .Net, Java, Objective-C, SQL, Python;

Architecture & platforms: Linux, Solaris, Windows, UML, Design Patterns;

Web technologies: HTML, JSON, RESTful, XML, XSLT, PHP, LAMP, MQTT, SOAP;

Source Control: Git, SVN (Subversion), TFS, CVS, Clearcase, Source Safe;

Virtualization: VMware, Xen, OpenVZ, VirtualBox;

Cloud technologies: PCF, Microservices;

Secure coding: Qualys, Veracode, SonarQube.

EXPERIENCE SUMMARY

Charles Schwab (2016-present), National Institutes of Health / National Center for Biotechnology Information (2013-2016), Bank Otkritie (2010-2013), Deutsche Bank (2009-2010), UBS (2007-2009), CQG (2006-2007), ABBYY (2004-2006), Intel (2001-2004).

EXPERIENCE DETAILS

2016 – Present, Software Development Consultant, Charles Schwab (schwab.com), Austin, TX

Systems: About 60 existing middleware applications, new Enterprise Messaging Bus based on Solace solution, new Rate Quotes provider service, new Document Ingestion Utility – a project for business process automation.

- Designed and implemented multiple modules for the new Enterprise Messaging Bus;
- Implemented automated CI/CD pipeline for the Bus using BitBucket, Bamboo and PowerShell scripting;
- Lead several teams in the Messaging Bus onboarding process; helped them to achieve their functional and performance goals;
- Worked with the product owner to find acceptable design solutions;
- Analyzed performance challenges, optimized the Messaging bus, improved overall performance 100x times, worked with a component vendor to optimize it even further;
- Implemented Rate Quotes provider service – relatively small REST service that provides rates data for Schwab trading web site or mobile applications;
- Lead a distributed team of nine people;
- Interviewed and hired two teams for the new project.

Environment: C#, MS SQL Server, Git, JIRA, Confluence, BitBucket, Bamboo, Veracode, Windows, Linux, PCF, RabbitMQ, Solace, Redis, Aerospike, Asp.Net Core, OAuth, TDD, ATDD, Scrum.

2013 – 2016, Software Development Engineer, NCBI (www.ncbi.nlm.nih.gov), Washington, D.C. Metro Area

System: NCBI Login

An authentication system for NCBI and similar organizations in Canada, UK and South Korea. It allows users to authenticate with their federated accounts from hundreds of institutes and agencies all across US. Normal system load ~20 million requests per week, ~6 million registered users.

- Took responsibility for Authentication System, implemented multiple improvements;
- Worked with dozens of institutes' IT services to set up integration with NCBI authentication;
- Worked with internal teams to implement NCBI authentication for their projects;
- Optimized performance and improved reliability of the system;
- Worked with institutes in UK, Canada and Korea on projects to deploy and adapt instances of NCBI Login System for their needs;
- Set up automated monitoring and statistics reporting;
- Replaced several components of the system that did not satisfy requirements for security, maintainability and monitoring, handled several brute force attacks from the Internet;

Environment: C++, C, Python, MS SQL Server, Git, JIRA, Confluence, Windows, Linux, OAuth.

2010 – 2013, Head of Corporate Business Technology, Bank Otkritie (www.open.ru/en/), Moscow, Russia

Systems: Internet Banking, SugarCRM, OTRS, CreditRegistry, Accounting System, SMS Information Service

A set of systems designed for needs of Bank's corporate clients and VIP oriented business.

Different systems are integrated. Some services implemented from scratch, another modified and adapted from open source projects.

- Headed development, integration and support of all information systems of Corporate Business Department. Reported to Vice President of the Bank;
- Worked as an interface between IT and Business departments;
- Lead a project to implement CRM system for Corporate Business from the beginning until successful completion;

- As head of department successfully implemented several analytical and reporting systems for business and bank's top management;
- Lead multiple projects and organized interactions between key departments to resolve business tasks, represented the business in IT;
- Established real time monitoring of business critical infrastructure;
- Supervised development of SMS Information Service;
- Headed successful integration of old Online Banking System and a new one. Daily workload ~100,000 documents, ~30,000 corporate clients;
- Improved Online Banking system stability making it most stable information system in the Bank;
- Designed and supervised implementation of a framework for internal services development: unified service management, logging, configuration management, communication layer. It served as platform for five different components processing ~50,000 transactions daily with uptime of ~6 months;
- Led continuous efforts to optimize response time of SugarCRM. It improved from 2 – 10 seconds to less than 1 second while number of users increased from 200 to 3000;
- Obtained solid knowledge of corporate banking services.

Environment: C++, C#, Python, Perl, PHP, STL, Boost, Oracle, MS SQL Server, MySQL, SVN, ZeroC ICE, NUnit, CppUnit, UML, Redmine, Windows, Linux, Agile.

2009 – 2010, Manager of FX Market Team (AVP), Deutsche Bank (db.com), Moscow, Russia
Systems: ARIS, Score

Two automated risk management systems that value more than 1M trades daily. They are written in C#, use external risk engine written in C++, running on DataSynapse grid. DBMS – Oracle. For some types of reports FireBird is used.

They are deployed to 2 Citrix boxes, 10 application servers and pool of 3k DataSynapse engines.

- Supervised system development as technical owner
- Delivered 4 major releases of the systems without issues
- Implemented a number of new reports
- Implemented permissions system for books of trades and reports
- Developed automated regression testing of critical reports in collaboration with testing team
- Coordinated work of development team in Moscow and business in London, Singapore and South America
- Obtained knowledge of valuation of asset derivatives - FX, Money Market, FI, IR Swaps

Environment: C#, C++, STL, Boost, Python, Oracle, DataSynapse, SVN, UML, Jira, Confluence, Windows

2007 – 2009, Technical Team Lead, UBS (ubs.com), Moscow, Russia

System: Termi, Ultrabond

Solutions designed for securities trading, pricing, order management, trade audit, Mortgage-Backed securities data analysis and much more; used for trading of different derivatives; composed of a large number of processes; a huge number of batch jobs, scripts and cron jobs; and at least 3 databases; communication layer was Tibco Rendezvous and ZeroC ICE.

- Transferred ownership of the system from another external team in 1.5 months;
- Supported Termi system until its total decommission;
- Assisted in step-by-step migration of dataflow into another new systems;
- Obtained knowledge of pricing of Mortgage-Backed securities, FI, FX derivatives;
- Developed Perl script for conversion and import of historical data form a set of files;
- Ported server side software for Windows – the code became cross-platform – Solaris, Linux, Windows.

Environment: C++, C#, Perl, STL, Boost, Threading, Syncfusion, Tibco RV, ZeroC ICE, Sybase, Oracle, CppUnit, NUnit, Clearcase, FIX, UML, Jira, Confluence Linux, Windows, Solaris

2006 – 2007, Senior Software Developer, CQG (cqq.com), Moscow, Russia

Product: CQG for Windows

Solution for all professional trader needs. It includes market coverage for futures, options, fixed income, foreign exchange, equities and indices. It incorporates several different interfaces – depth-of-market order book views, charts, spreadsheets.

- Guided development team of 4 people as a team lead;
- Analyzed performance of the application, optimized its bottlenecks;
- Designed and implemented new GUI improvements;
- Obtained solid knowledge of standard development process – CMMI, PSP, TSP, Scrum;
- Obtained knowledge of financial market terminology and business processes.

Environment: C++, COM, ActiveX, STL, Boost, WTL, MFC, CVS, UML, Windows

2004 – 2006, Software Developer, ABBYY (abbyy.com), Moscow, Russia

Product: ABBYY Recognition Server (http://www.abbyy.com/recognition_server/)

Server-based OCR solution for automated document processing designed for high volume workload with transparent scalability and fault tolerance.

- Designed and implemented GUI management console for the server;
- Improved scalability for huge-size multipage documents processing;
- Ported OCR Engine from Windows to Linux;
- Developed compiler for Windows resource file language;
- Released first version of the Recognition Server.

Environment: C++, STL, MFC, ATL, COM, RPC, MMC, Windows Service, UML, Windows, Linux

2001 – 2004, Software Developer, Intel (intel.com), Nizhny Novgorod, Russia

Product: Intel Performance Libraries (<http://software.intel.com/en-us/articles/intel-ipp/>)

Highly optimized cross-platform software functions for multimedia, data processing, and communications applications.

- Obtained outstanding experience in software performance analysis and optimization;
- Implemented and optimized library functions for Intel processors: Pentium 4, Itanium, XScale;
- Implemented algorithms for matrix processing, video processing, cryptography, big number arithmetic, XML processing;
- Performed competitive performance analysis of MySQL engine built with GCC vs. Intel C++ Compiler for joint project of Intel Compiler team & MySQL, improved performance of MySQL on their benchmarks by 30%;
- Acquired deep knowledge of cross-platform software development;
- Obtained important experience of working in a global organization and performing to its corporate values;
- Honored with a Very Special Thanks Award.

Environment: C, C++, C#, Java, P/Invoke, JNI, Assembler, VSS, CVS, StarTeam, BitKeeper, NUnit, JUnit, Rational Purify, Intel VTune, UML, Windows, Linux, PVSC Tracker, Agile, XP

EDUCATION & CERTIFICATIONS

2001 – MS in Physics, Moscow Institute of Engineering Physics, Russia

EXCELLENT REFERENCES AVAILABLE UPON REQUEST