Denis Volkov

E-mail: denvolkov.it@gmail.com   **Phone:** +1 (650) 265-1794

LinkedIn: http://ru.linkedin.com/in/denvo   **Skype**: den_vo

Summary

- Creative, experienced and self-motivated web services developer with skills and practical knowledge of different aspects of software engineering.

- Portfolio includes over 10 own projects and commercial web-sites with non-standard logic.

- Practical knowledge of modern web development languages and technologies such as Java, PHP, Perl, JavaScript, AJAX, JSON etc. Understanding of high-load service concepts, performance issues and optimization.

- During over 10 years of my work as software developer an experience in different applied areas has been acquired such as e-commerce, computer graphics, networking and so on.

- Have strong analytic and research skills, have ability and interest to learn new technologies. Excellent communicating and brainstorming skills.

- Deep understanding and successful experience in all stages of software development process: client demands analysis, prototyping, programming, UI design, testing, documenting, deployment and support.

Skills

Web (8 years): PHP (GD, PCRE, XML), Perl (mod_perl, Mason), JavaScript (AJAX, JSON, jQuery, ExtJS), ActionScript (AS3), XHTML, CSS. HTTP, HTTPS, SMTP, MIME. Tomcat, Apache httpd. FireBug. Table-less markup. Optimization (Memcached, sprites).

C++ (8 years): Win32 API, STL, VCL, Sockets. Microsoft Visual C++, Borland C++ Builder, GNU, make.

Java (4 years): AWT, Swing, Networking, JDBC, JUnit, Servlets, JSP, Persistence, Hibernate, annotations. Ant, NetBeans.

Databases: MySQL, MS SQL Server. Query performance turning.

Platforms: Win9x/2k/NT/XP, Linux. Virtuozzo. Bash, RPM/RPMBuild.

Technologies: XML/XSLT/XPath. Public- and symmetric-key cryptography, HASP.

Strong mathematics background, vector analysis, image processing algorithms.

Digital electronics development, AVR-based micro-controller programming (ASM and C).

Professional experience

Consultant, Oct. 2009 – present

Community-based online drawing service (pucyem.ru) – Own project. JavaEE, Java Applets, JavaScript, MySQL. Designed and developed online service for painting on unlimited white board with communication tools. Users of the service can draw online using several drawing tools as well as see pictures drawn others. Several users can draw on the same location with immediate seeing final result. Some social-networking tools like chat and user locator are included.

Online service for confidential data storage (cryptopad.org) – Own project. JavaScript, jQuery, AJAX, PHP5, MySQL. Designed and developed JavaScript-application with client-side data encryption. AES symmetric cryptography algorithm is used for client-side encryption of user data to prevent unauthorized data access in network or server. Data is divided into pages to reduce encryption time. Salted and hashed by MD5 user password is used as authorization token to prevent data to be deleted/ overwritten by third-party. Back-end is developed using PHP5 and MySQL, AJAX is used for client-server data exchange. JavaScript application includes rich-text editor and password directory, also allows to change account password by re-encrypting all pages using fault-safe algorithm. Over 1100 users (March 2011).

Online services for international translators exchange (translationdirectory.com). PHP5. Designed and developed personal account service with profile editor, job board, notification service and mass-mail tools. Custom file-based database engine is developed using PHP5 to eliminate shared-hosting MySQL server usage limits.

Application for speech therapists and e-commerce web site (logoprog.ru). C++ (MS VC), PHP5, Java. A desktop application was developed for preparing visual materials for speech therapists. An online store was designed, license tools and integration with different payment systems was implemented.

Online map services access plug-in. C++, libCURL. Developed module for digital map-making system to enable download and use map data (surface images, DEM) from online map services (GoogleMaps, Wikimapia, WMS etc). Map access protocol over HTTP client implemented using libCURL.

Online account for clients of archive company. Java, JDBC, SQL Server, MySQL, HTTPS/SSL, PHP5. Designed and developed online service to allow clients to work online with stored documents: view scanned images and place orders for off-line actions, such as original documents delivering. HTTPS client certificates and one-time passwords are used for user authorization. Developed Java services for data synchronization between external web server with Apache/PHP/MySQL back-end and intranet corporate server with main DB using Win2k8/SQL Server.

RFID-based document registration system. C++, SQL Server. RFID-reader data processing service was developed to analyze RFID label detection events from multiple readers/antennas and record current location of document as well as document movement history into DB. Another tool is used on gate-keeper control panel to control document passing.

Senior web-developer in **Acronis**, Sep. 2006 – Oct. 2009

Site templates system re-design. JavaScript, ExtJS, AJAX, Perl, Mason, DBI, MySQL. Template structure for corporate sites was re-designed to reduce cost of support. Online editor for translators and site building/deployment tool were developed using JavaScript/AJAX front-end and Perl back-end.

E-commerce system support. Perl, SMTP, MIME. Customer reminder system was developed to send e-mail notifications to customers who downloaded demo- and promo-versions.

IT-consultant in **Delis-A**, 2005 – 2006

Personal expert system for archive professionals. C++, HASP, PHP, MySQL. Expert system for determining of document storage terms was developed as desktop application using C++ then as web-service using PHP and MySQL. In both version stemming algorithm was used to find keywords in document attributes. PHP stemming module was developed for online version. HASP hardware protection system was used for desktop version.

Software developer in **SWSoft Inc.** (now Parallels Inc.), 2004 – 2005

Virtuozzo server management modules. Perl, MySQL, Bash. Modules for virtual server remote management in Virtuozzo environment were developed for hosting provider automation online system.

RPM-based installer. RpmBuild, Make, Bash. Installer system was developed to simplify deployment of hosting provider automation system on RedHat Linux platform. This RPM-based system includes number of spec-files for rbmbuild utility as well as set of make scripts to automate distributive build process.

Software developer in **Racurs**, 2001 – 2004

Montage Desktop application. C++, VCL, image processing. Visual project management application ("Montage Desktop") for digital map-making system was developed to simplify project creation, image layout and overall control.

Corporate site development. Perl, PHP, MySQL. Corporate site was re-designed and content management system was developed using PHP and MySQL. Intranet online services for development support were developed.

Distributed data storage system. C++, VCL, sockets. Distributed data storage for map-making system was designed to allow centralized management of large projects and access to project data from multiple workstations. Implemented set of management tools and client support libraries.

Education

1995-2001

Moscow Institute of Physics and Technology (PhysTech)

Department of Applied Mathematics and Economics, Chair of System Programming.

Master of applied physics and mathematics cum laude.

Diploma title: Distributed network data processing in digital photogrammetric system.

References

Available upon request.