

Alexander V. Makeev

Novosibirsk / Ekaterinburg, Russia • Member since December 22, 2014

Alexander carries multiple technical degrees in Nuclear Physics and worked at CERN as a Python developer implementing dynamic performance optimizations for complex web applications. He excels at rapidly integrating reliable web technologies and achieving flexible software architecture designs. His strong theoretical and practical background in IT, business consulting, and project management makes him extremely capable on projects of any size.



PORTFOLIO

Elksimo Inc.

Linux, Nginx, supervisord, Sentry, SQLite, MySQL, PostgreSQL, Python, Django...

ASIA Consulting Group, Inc.

Python, Django, RabbitMQ, PostgreSQL, SQLite, MySQL, Google App Engine, AWS...

Novosibirsk State University

C, C++, Java, OOP, OOA&D, UML, Git, Network Programming, Parallel Programming

EXPERIENCE

HTML, 11 years

CSS, 10 years

SQL, 9 years

Python, 7 years

UML, 7 years

JavaScript, 7 years

AJAX, 6 years

Model driven development, 5 years

AVAILABILITY

Unavailable

PREFERRED ENVIRONMENT

Linux/Mac OS, JetBrains (PyCharm), Git

THE MOST AMAZING...

...full-stack project I've developed is an online website constructor involving 5 different programming languages and integrating more than 20 modern technologies.

Web Developer, Project Manager 2013 - 2014

Elksimo Inc.

- Created complete project infrastructure for development, testing, deployment, and bug/issue tracking.
- Developed a delegated programming pipeline.
- Created Web service for online landing page construction and hosting.
- Created a Web service for finding a location for a wedding.
- Created 17 landing pages with pixel--perfect HTML & CSS and split-testing back end.

Technologies: Linux, Nginx, supervisord, Sentry, SQLite, MySQL, PostgreSQL, Python, Django, PHP, JavaScript, JQuery, AJAX, Handlebars.js, Raven.js, REST, HTML, CSS, git, gitolite, SSH, Google Analytics

Senior Web Developer, R&D Department Manager

2011 - 2014

ASIA Consulting Group, Inc.

- Created Web service software that provides e-polls for companies (estimating staff involvement ratio, discovering organization strengths and weaknesses, etc.).
- Created an application for automated poll form recognition using image processing.
- Gained experience in managing teams with diversely specialized members (IT-specialists, designers, testers, business consultants and clients).
- Gained experience in resource estimation, project planning and time management.

Technologies: Python, Django, RabbitMQ, PostgreSQL, SQLite, MySQL, Google App Engine, AWS, Amazon SES, Amazon Route 53, Amazon EC2, HTML, CSS, JavaScript, JQuery, Bootstrap.js

Teacher of IT and Computer Science

2009 - 2014

Novosibirsk State University

- Created education methodic. Created lectures for fast key aspects understanding. Structured programming knowledge.
- Approved communication and presentation skills. Learned to transfer thoughts and ideas to students.
- Learned mentoring and 1-to-1 education process.
- Trained students to be best at programming, by results of final exams.
- Got 5 students for scientific advisory (~2 students per year) as a result of good training methodology acceptance.

Technologies: C, C++, Java, OOP, OOA&D, UML, Git, Network Programming, Parallel Programming

2008 - 2014

Junior Scientist and Web Developer

Budker Institute of Nuclear Physics

- Created a complex, graph-based configuration database and UI for managing hardware and software settings on physical facilities.
- Created utilities and plugins for hardware accessing and data processing.
- Gained experience in scientific writing and presenting. Posted articles to scientific journals and presented work results on conferences.
- Gained experience in role delegation and project management by being a scientific adviser of approximately two students per year.

Technologies: Linux, C, C++, Qt, GCC, MinGW, Python, PyQt, SQLite, PostgreSQL, NetworkX, Django, JavaScript, JQuery, d3.js, Node.js, RabbitMQ, ZeroMQ

Senior Web Developer

2008 - 2010

Netive Software, Ltd.

- Developed modules for Claromentis Intranet Web Application (outsourcing for Great Britain).
- Supported and maintained older modules of Claromentis.
- Progressed from ordinary team member to Team Lead.
- Developed clean, well-designed Object-Oriented Programming on PHP.
- Worked in a team with developers and testers.

Technologies: PHP, HTML, JavaScript, JQuery, MySQL, nginx, Apache, SVN

Python Developer 2009 - 2009

CERN

- Created Oracle connections pool with dynamic performance optimisation for Python web application.
- Learned advanced Python programing.
- Created deep unit tests with high code coverage involving black box and white box testing methodologies.
- Created user and API documentation.
- Worked in multilingual teams, participated in regular meetings and planning.

Technologies: Python, Oracle, MySQL, SQLite, Resource pooling

Software Developer

Institute of Automation and Electrometry

- Created a program for line segment recognition in a noisy, interlaced video stream.
- Created software for visually constructing and processing graphs using a set of implemented image-processing algorithms.
- Implemented 20+ mathematical image processing algorithms.
- Gained experience in analyzing algorithms documentation and using it as instructions for implementation.
- Gained experience in working with scientific software in a team setting.

Technologies: C, C++, C#, .Net, Java, Intel OpenCV, Microsoft DirectX, OpenGL, Pixel Shaders Programming, Vertex Shaders Programming

System Administrator 1999 - 2008

SibTechnoSoft, Ltd.

- Supported Web servers based on Perl, PHP and Apache.
- Created a virtual private network (VPN).
- Configured 100+ PC hardware units, operating systems, drivers, and software settings.
- Optimized PC machine performance.
- Supported client PC machines through phone calls and personal visits.

Technologies: VPN, PPPoE, Windows Server, FTP, HTTP, CGI, Perl, PHP, Apache, HTML, JavaScript, CSS

EXPERIENCE

Web service for finding a wedding location (Development)

http://expert-banket.ru

I implemented the full stack architecture for this wedding-locator service. Technologies used in development were:

Server-side: Nginx, PostgreSQL, SQLite, Python, Django, Python Imaging Library (PIL/PILLOW)

Client-side: JavaScript, JQuery, AJAX, Handlebars, HTML, CSS

Web service for construction and hosting of online landing pages (Development)

http://leadmagnit.ru

I implemented the full stack architecture for this service. Technologies used for development were:

Server-side: Nginx, PostgreSQL, SQLite, Python, Django, Python Imaging Library (PIL/PILLOW), node.js, grunt.js, Handlebars

Precompiler, PHP

Client-side: JavaScript, JQuery, AJAX, Handlebars, HTML, CSS

Designed fifteen high-quality landing pages (Development)

http://portfolio.pub.elksimo.com

Designed and implemented full stack architecture for these fifteen landing pages (pixel-perfect HTML+CSS was implemented by another person). Technologies used for development were:

Server-side: Nginx, Node.js, Grunt.js, Handlebars Precompiler, PHP Client-side: JavaScript, JQuery, AJAX, Handlebars, HTML, CSS

SKILLS

Languages

Python, XML, UML, CSS, JavaScript, SQL, HTML, C++, C, PHP, HTML5, BASIC, F#, Pascal, Delphi, CSS3, Java, JADE, XSLT, Visual Basic, XML/XSLT, C#, T-SQL

Frameworks

Django REST Framework, web2py, Django, Zend Framework, .NET, Silverlight, AngularJS

Libraries/APIs

D3.js, jQuery, SQLite, Handlebars, jQuery UI, Node.js, PyQt, PyQt4, SciPy, React.js, Amazon SQS, Python Imaging Library, PiLLoW, OpenCV, DirectX, NumPy

Tools

SQLiteManager, uWSGI, jQuery Plugins, PyCharm, Grunt, Gimp, Nginx, Apache, Scikit-image, Boto, Amazon SNS, Amazon SES, Eclipse, Adobe Photoshop, lighttpd, Google Analytics

Paradigms

AJAX, Data-driven Programming, REST, Model driven development, Network programming, Agile Software Development, Waterfall development, Concurrent Programming, Test-driven Development (TDD)

Platforms

Debian Linux, Linux, Windows, Mac OS, Amazon EC2, LAMP, Amazon Web Services (AWS), Django CMS

Storage

MySQL, PostgreSQL, MS SQL, NoSQL, Neo4J

Misc

Networks, Amazon Route 53, DNS, Apache HTTP Server, Game Development, HTTP, Scientific Computing

2016/10/16	Alexander V. Makeev - Freelance Python Developer for Hire Toptal	
EDUCATION	Postgraduate degree in Measurement Methods and Technical Equipment for Physical Experiments	2008 - 2012
	Budker Institute of Nuclear Physics - Novosibirsk, Akademgorodok	
	Master's degree in Physical and Technical Information Technologies Novosibirsk State University - Novosibirsk, Akademgorodok	2008 - 2010
	Bachelor's of Science degree in Automation of Physical and Technical Researches Novosibirsk State University - Novosibirsk, Akademgorodok	2004 - 2008