Fedorov, Vsevolod

Telegram, seva4job@gmail.com, LinkedIn, GitHub, OpenDev commits, PDF version, Online version

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- I write good code;
- I know how to improve an existing project quality, how to refactor bad code;
- I produce solutions;
- I complete complex tasks.

- Python, C++, OCaml, C#, Scheme;
- OOP, Functional, Multi-threaded, Async;
- Kubernetes/Helm/Docker, AWS, libvirt, PyTest, PySide, SQL, Web, SS7, ASN.1 etc;
- Jenkins, Gitlab CI, Ansible;
- Linux, Bash.

Experience

Own non-commercial project, Hyperapp

Apr 2024 - Now

Hyperapp - Framework for creating GUI application.

- Python
- PySide

Network Optix, Software Developer, CI Engineer

Jan 2017 - Mar 2024

Designed and developed library for functional tests to test company product. It is used for all functional tests developed after that.

- Python;
- PyTest, VirtualBox, Vagrant;
- Linux.

Designed and developed CI system for the company. It builds product for different platforms, run unit and functional tests. Later was replaced by another version.

- Jenkins, Jenkins Pipelines;
- Linux, Windows.

Designed and developed scalability tests for company product.

- Python;
- Jenkins/JJB, AWS (EC2, VPC, CloudFormation, Boto), VirtualBox, ElasticSearch, Metricbeat, Grafana, RTSP;
- Linux.

Designed and developed OS images build automation.

- Python;
- Jenkins/JJB, Packer (by Hashicorp), Artifactory/AQL, libvirt+KVM, VirtualBox, AWS (AMI, Boto).

Documented, redesigned and modified release deployment application used internally by the company (DepCon). Created Continuous Deployment - test version deployed on MR, release deployed on merge.

- Python;
- Django, Docker, Kubernetes/Helm, Gitlab CI, Jenkins/JJB, Artifactory.

Created automation for building Conan packages.

- Python;
- Jenkins/JJB, Conan.

Created Conan recipes for Squish and Python.

Contributed to Jenkins Job Builder project. Rewrote template expansion subsystem. Added error location tracebacks. Migrated unit tests to pytest. Now I am a maintainer.

Developed several Web applications used inside company.

- Python, JavaScript, HTML, CSS;
- Flask, FastAPI, Jinja2.

Created several deployment automations (CD).

- Ansible, Kubernetes/Helm/Docker, AWS CloudFormation.

Deutsche Bank, Software Developer (AVP)

Nov 2015 - Jan 2017

Financial analytical software project (SCORE): Developed new functionality, refactored, fixed bugs.

- C++, C#;
- Visual Studio, Resharper, WinForms, Git;
- Windows.

Kaspersky Lab, Software Developer

Oct 2013 - Oct 2015

Kaspersky Anti-Spam (KAS) SDK project. Developed new functionality, refactored, fixed bugs. Designed and developed new KAS SDK architecture.

Developed HTTP service for KAS SDK. Developed functional and unit tests.

Organized continuous integration based on Jenkins and Docker

- C++ (GNU C++, MSVC);
- CMake;
- Linux, FreeBSD, Windows (cross-platform development).

Atlas / SmartTeleMax, Software Developer

Apr 2011 - Oct 2013

Designed and developed Registration Authority system for 'Atlant UC' (CA), required Python librarys.

- Python
- SqlAlchemy, PyAsn, corporate web framework
- Linux

Developed continuous integration for 'Atlant UC' project using Jenkins and Selenium WebDriver.

NTC Komset, Lead Software Developer

Jan 2003 - Apr 2011

Developed several servers and modules for SS7 monitoring system.

- C++, Python, Objective CAML
- omniORB, omniORBpy, pthreads
- Linux

Proposed, designed architecture and implemented key parts for second version of SS7 Monitoring system (total rewrite of ver.1).

- Objective CAML, Python
- CORBA, sockets, pthreads, omniORB, omniORBpy
- Linux

Proposed, designed and implemented Python to Objective CAML interlanguage proxy library 'py2caml'. It allows to write Python extensions in OCaml.

- C
- pthreads
- Linux

Proposed, designed and implemented ASN.1 translator. It gets ASN.1 sources as input and produces different outputs, such as OCaml sources for decoding and picking data from ASN.1/BER, Python objects to encode, decode and visualize ASN.1/BER.

- Python
- PLY (Python Lex-Yacc by David M. Beazley)

Proposed, designed and implemented authentication subsystem for omniORBpy based on omniORB SSL transport.

- Python, C++
- omniORB, omniORBpy, openssl API

Proposed, designed and implemented CORBA implementation for Objective CAML language. OCaml CORBA binding, IIOP 1.2 (1.3).

- Objective CAML, Python (back-end for IDL compiler).
- omniORB compiler as IDL compiler front-end.

Designed architecture and implemented base classes for for GUI applications, used for local SS7 monitoring point

- Python
- PyQt

RusEuroSoft, Software Developer

Aug 2002 - Dec 2002

Windows GUI for forex demo system.

- C++
- Win32 GUI API
- Windows

"Connection server" for forex demo system.

- C++
- Win32 Sockets, Threads
- Windows

Jet Infosystems, Software Developer

June 2001 - Jan 2002

Designed and developed Scheme extension for parsing, decoding and encoding email messages (rfc822, rfc1521, rfc1522).

- C++
- Unix (Sun, HP)

Designed and developed Scheme extension for accessing LDAP from scheme language.

- C++
- Unix (Sun, HP)

Developed small parts of "Dozor" project (email monitoring and archiving system).

- MZ Scheme
- Unix (Sun, HP)

Zenon N.S.P., Software Developer

Jan 2001 - Mar 2001

C++ ('foundation') library for developing multi-threaded servers for Unix platforms, including multi-threading classes, C++ wrappers to posix sockets, logging classes, generalized error handling, and much more.

- C++
- Unix (FreeBSD, Sun, Linux)

'Netflow collector' - (muiti-threaded) server for receiving and preprocessing (filtering and aggregating) of CISCO netflow data.

- C++
- Unix (FreeBSD, Sun, Linux)

OXIR Internet Solutions, Lead Software Developer

Jul 2000 - Dec 2000

CORBA application server for the Web hosting billing system.

- C++
- omniORB2 CORBA implementation, Oracle Template Library (OTL), Oracle DB.
- Linux

CGI scripts for web-hosting billing system.

- Python
- omniORB2 and TAO CORBA implementations
- Linux, FreeBSD

Apache web-server module for client authorization.

- C++
- MICO CORBA implementation
- Linux

R-Style Software Lab, Software Developer

Jan 1996 - Jun 2000

Designed and developed 'RS Web Server' - server for web requests (via CGI & ISAPI). Server allows CGI requests processing by RSL - corporative scripting language, connected with Web servers via CGI and ISAPI 'gates'.

- C++
- Sockets

- Windows NT

Desinged and developed N-tier application servers for the "Condor" project:

- Server for execution of corporative scripting language (RSL);
- Server for execution of Dynamic SQL statements and DDL;
- Scheduler;
- Parts of security server.

Technologies used in "Condor" project:

- C++ (Borland C++)
- MS RPC, corporative libraries
- Windows NT

Designed and developed C++ library for a SQL databases access. Target SQL Servers: MSSQL and Sybase.

- C++ (Borland C++)
- db-library for MSSQL and Sybase, corporative libraries
- Windows NT

Designed and developed extention package to corporative scripting language (RSL) providing access to SQL and Condor business functionality.

- C++ (Borland C++)
- Windows NT, Windows 95

Designed and developed email requests processing server for corporate scripting language (RSL) as part of RS-Bank system.

- C++ (Borland C++)
- Btrieve
- Windows NT, Windows 95, DOS DPMI32

Designed and developed transaction subsystem for RS-Depo (depository system).

- C++ (Borland C++)
- Btrieve
- Windows NT, Windows 95, DOS DPMI32

Designed and developed corporate security subsystem, used in some applications (including RS-Depo and RS-GKO), security kernel and administrative utilities.

Developed Bank stock market bookkeeping system (RS-GKO).

Cherry software, Software Developer

Dec 1994 - Nov 1995

DOS-interface for the spreadsheet.

- C++
- Turbo Vision, corporative libraries
- DOS DPMI32

C++ tools for database access.

- C++
- Paradox Engine

BIS, Banking informational systems, Software Developer

Sep 1993 - Jul 1994

Remote bank's client system, client and server sides.

- Turbo pascal, Progress 4GL
- Progress, Turbo Vision, Paradox engine
- DOS

Also participated in development of small parts of banking system on Progress 4GL.

Skills:

- *Programming languages:* Python, C++, Objective CAML, JavaScript, C#, MZ Scheme, Bash;
- *Database:* SQL, PostgreSQL, MySQL, Oracle, SQLAlchemy, PonyORM;
- *Virtualization:* Kubernetes, Helm charts, Docker, AWS (EC2, VPC, IAM, Boto etc), VirtualBox, libvirt+KVM;
- *CI and automation:* Jenkins, Jenkins Job Builder, Gitlab CI, Ansible, AWS CloudFormation;
- *Web:* HTML, CSS, Flask, FastAPI, Django;
- *Others:* Packer (by Hashicorp), ElasticSearch, Grafana, Artifactory, PyQt/PySide, SS7, ASN.1, PKI.

Education:

Graduated from Moscow State Aviation Technological University (MATI), 1988-1993, as Engineer in microelectronical technology.

Languages:

- Russian: Native
- English: Good reading, can write documentation, discuss technical topics.

Personal:

Resident of Russia (Moscow).

No relocation. Only remote or hybrid jobs.