

# Ushakov Andrey Vyacheslavovich

Date of birth: 04.06.1979

Marital status: married

Contact information:

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## Education

1. September 1996- June 2000 Ural State University. Bachelor of physics.
2. September 2000- June 2002 Ural State University. Master of physics.

## Experience

### **April 2016 – present time**

Aspose, Aspose.Words group (<https://www.aspose.com/>). Software architect, Lead software developer.

Environment: MS Windows, Linux, C#(.NET Framework), C++

- Designing, development, testing of system for auto porting of Aspose.Words library from C# to C++.
- Designing, development, testing of system for auto porting of examples for Aspose.Words library from C# to Python.
- Designing, development, testing of system for simplifying of source code for Aspose.Words library.
- Designing, development, testing of systems to solve information security problems.

### **December 2017 – October 2021**

"activedictionary" project (platform + social network for learning). Software architect, Lead software developer.

Environment: Linux, Python (django, celery, asyncio, aiohttp), Go, Java, MySQL, HTML5, JavaScript

- Designing, development, testing of subsystem for working with texts.
- Designing, development, testing of subsystem for creation of library.
- Designing, development, testing of subsystem for working with users and rights.
- Designing, development, testing of subsystem for creation of newswire.
- Designing, development, testing of subsystem for working with dictionaries/glossaries.
- Designing, development, testing of subsystem for creation of quizzes and exams.

### **August 2016 – August 2017**

UrFU (<https://urfu.ru/>). Mathematician, Software architect, Lead software developer.

Environment: MS Windows, Linux, C++, Qt

- Designing, development, testing of system for conducting and processing optical measurements.

**September 2015 – August 2016**

"Nevlabs" (<https://nevlabs.ru/>). Lead software developer.

Environment: Windows, C# (.NET Framework), MS SQL

- Designing, development, testing of report subsystem for "Open clinic" project.

**February 2014 – August 2015**

"Poligon" (<https://plgn.ru/>). Software architect, lead software developer.

Environment: Linux, Erlang, C/C++

- General-purpose CLI (command line interface) for different network devices (commutators etc): architecture creation, development, testing.

**February 2013 – April 2016**

NPO "Sapfir" (<https://www.nposapfir.ru/>). Software architect, lead software developer.

Environment: MS Windows, Linux, C#(.NET Framework, Mono), F#, Erlang, MS SQL, PostgreSQL

- Creation and formalization of the development and testing processes.
- Introduction of TDD, Code review, Continuous integration.
- Create the architecture for business process management system.
- Designing, development, testing system for business process management.
- "Resuscitation" of business process management system. Support legacy code, the elimination of technical debt.
- The transition to the using of free software
- Management of other developers.

**June 2012 – February 2013**

"Ideco" (<https://ideco.ru/>). Lead software developer.

Environment: Linux, Python, C/C++, Firebird, PostgreSQL

- Development of a specialized Linux distribution.
- Introduction of TDD, Agile, Code review, Continuous integration.
- SCRUM-master.
- Consultations on Erlang.

**November 2011 – February 2014**

Aspose, Aspose.Words group (<https://www.aspose.com/>). Lead software developer.

Environment: MS Windows, C#(.NET Framework)

- Development and testing of SAAS API.

**January 2011 – June 2012**

"IskraUralTel" (<https://iskrauraltel.ru/>). Software developer.

Environment: MS Windows, Linux, C#(.NET Framework), JavaScript, MS SQL, Java, C/C++, Erlang

- Designing, development, testing of "GSM-R" project: the mobile communication system (GSM) for Railways.
- Designing, development, testing of "FAM" project: alarms monitoring system.
- Designing, development, testing of "System-112" project: system for calling emergency services.
- Introduction of TDD.
- The transition to the use of the C++ 11 standard.
- Training of functional programming, TDD, C#/.NET, Erlang.

**December 2010 – January 2011**

"ACS". Software developer.

Environment: MS Windows, C# (.NET Framework), JavaScript, MS SQL

- Creating functional tests for "Electronic trading platform" project.

**February 2009 – December 2010**

"Kontur" (<https://kontur.ru/>). Software developer.

Environment: MS Windows, C# (.NET Framework), Firebird

- Designing, development, testing new functionality for "Kontur-Extern Light" project.
- Support legacy code.
- SCRUM-master.

**April 2007 – February 2009**

"Eastwind" (<https://www.eastwind.ru/>). Software developer.

Environment: MS Windows, C# (.NET Framework), MS SQL

- Designing, development, testing of the ETL-system for the "MCN" (Moscow Cellular Networks) project.
- Designing, development, testing of the ETL-system for the new billing system.

**November 2004 – March 2007**

"OKB Novator" (<https://www.okb-novator.ru/>). Mathematician.

Environment: MS Windows, C# (.NET Framework), C/C++, Fortran, Borland Delphi

**November 2002 – November 2004**

"OKB Novator" (<https://www.okb-novator.ru/>). Software developer.

Environment: MS Windows, C# (.NET Framework), MS SQL, C/C++, Borland Delphi

- Designing, development, testing of the internal ERP-system.
- Designing, development, testing of the internal MES-system.

## Skills

### IT:

- Complete cycle of software development
- System programming (Win32 API, Posix)
- Cross-platform software development
- Computer graphics
- Multithreaded and distributed enterprise systems
- Reverse-engineering
- OOP, AOP, functional programming
- Agile: TDD, Scrum, Continuous Integrations

### Mathematics:

- Differential games
- Computer science
- Numerical methods, numerical analysis
- Computational geometry
- Compiler construction

## Languages, technologies, libraries

- **.NET:** C#, F#, .NET Framework, .NET, WinForms, ASP.NET MVC, WCF, CIL(MSIL)
- **Java:** Java2 SE6-8, Servlets, JSP
- **C/C++:** C++03/11/14/17/20, STL, Boost, wxWidgets, GoogleTest, GoogleMock, Readline, Qt
- **Erlang:** Erlang/OTP, Elixir
- **Python:** stdlib, Tornado, Bottle, Twisted, Django, NumPy, Celery
- **JScript:** JQuery
- **Assembler:** i386, PIC
- **Go**
- **Haskell**
- **Rust**
- **Databases:** MSSQL, PostgreSQL, MySQL, MongoDB
- **Build systems:** MSBuild, NAnt, Ant, Maven, make, CMake
- **Other:** Win32 API, POSIX, OpenGL, Xml, Json
- **OC:** Windows, Linux

## Certifications

### Microsoft ([Transcript](#)):

- [MCTS .NET Framework 2.0 Windows Applications](#)
- [MCPD .NET Framework 2.0 Windows Developer](#)

**Oracle:**

- [OCP Java SE 6 Programmer](#)

**LPI:**

- [LPIC-1: System Administrator](#) (LPIC-1 exam 101, exam 102)
- [LPIC-2: Linux Engineer](#) (LPIC-2 exam 201, exam 202)

**MongoDB University:**

- [M101J: MongoDB for Java Developers](#)
- [M101N: MongoDB for .NET Developers](#)
- [M101P: MongoDB for Python Developers](#)
- [M102: MongoDB for DBAs](#)

**Stepik:**

- [Algorithms: theory and practice. Methods](#)
- [Molecular biology of cell](#)
- [Functional programming in Haskell](#)
- [Introduction to computer architecture. Elements of operating systems.](#)
- [Competitive programming](#)
- [Math for competitive programming](#)
- [Golang programming](#)
- [Thank Go! Golang in practice](#)
- [Proofs, ChatGPT, and Python](#)

**Hackerrank:**

- [C++ \(Basic\)](#)
- [Go \(Basic\)](#)
- [Go \(Intermediate\)](#)
- [Java \(Basic\)](#)
- [Java \(Intermediate\)](#)
- [JavaScript \(Basic\)](#)
- [JavaScript \(Intermediate\)](#)
- [Problem Solving \(Basic\)](#)
- [Python \(Basic\)](#)
- [Python \(Intermediate\)](#)
- [SQL \(Basic\)](#)
- [SQL \(Intermediate\)](#)

**Publications****Linux Format Russian (<http://www.linuxformat.ru/>):**

- April 2011 "Erlang: Language for processes" ([article](#), [magazine](#))

- May 2011 "Erlang: Lots and lots of tasks" ([article](#), [magazine](#))
- June 2011 "Erlang: Base essences" ([article](#), [magazine](#))
- July 2011 "Erlang: Essences of language. Tuples" ([article](#), [magazine](#))
- August 2011 "Erlang: The collections as essences" ([article](#), [magazine](#))
- September 2011 "Erlang: Bit strings" ([article](#), [magazine](#))
- October 2011 "Erlang: String data" ([article](#), [magazine](#))
- November 2011 "Erlang: The essences is considered" ([article](#), [magazine](#))
- December 2011 "Erlang: Practice on the essences" ([article](#), [magazine](#))
- January 2012 "Erlang: Again the basic essences" ([article](#), [magazine](#))
- February 2012 "Erlang: Again practical work" ([article](#), [magazine](#))
- March 2012 "Erlang: Magic of bit strings" ([article](#), [magazine](#))
- April 2012 "Erlang: Magic of bit strings 2" ([article](#), [magazine](#))
- May 2012 "Erlang: Magic of bit strings 3" ([article](#), [magazine](#))
- June 2012 "Erlang: Let's study the multitasking" ([article](#), [magazine](#))
- July 2012 "Erlang: Stand before failures" ([article](#), [magazine](#))
- August 2012 "Erlang: Distributed systems" ([article](#), [magazine](#))
- September 2012 "Erlang: The benefits of libraries" ([article](#), [magazine](#))
- November 2012 "Erlang: Once again on the synchronization" ([article](#), [magazine](#))
- December 2012 "Erlang: Practice on multitasking" ([article](#), [magazine](#))
- January 2013 "Erlang: Again practice" ([article](#), [magazine](#))
- February 2013 "Erlang: Practice on multitasking" ([article](#), [magazine](#))
- March 2013 "Erlang: Practice on multitasking" ([article](#), [magazine](#))
- May 2013 "Erlang: Almost with queues" ([article](#), [magazine](#))
- July 2013 "Erlang: Again lot of tasks" ([article](#), [magazine](#))
- August 2013 "Erlang: Practice, practice and more practice - that's the way of the Jedi" ([article](#), [magazine](#))
- December 2013 "Erlang: Summing up" ([article](#), [magazine](#))
- April 2014 "Erlang: Testing" ([article](#), [magazine](#))
- August 2014 "Erlang: Let's test!" ([article](#), [magazine](#))

### System admin ([www.samag.ru](http://www.samag.ru)):

- April 2015 "Create IoC container for myself" ([article](#), [magazine](#))
- March 2016 "Linux Professional Institute exams" ([article](#), [magazine](#))

### My projects

github profile: <https://github.com/stdstring>

### Blogs

livejournal profile: <http://std-string.livejournal.com/>