



[Contacts \(https://github.com/asd-and-Rizzo/asd-and-Rizzo.github.io/blob/master/contacts.md\)](https://github.com/asd-and-Rizzo/asd-and-Rizzo.github.io/blob/master/contacts.md)

*Location:* Belarus, Minsk

I like creating software, deliver correct and intuitive functional and code in time, create sustainable digital artifacts. I know many techs (mostly .NET/Windows) and use many tools. Experienced in open source. Applied machine learning is my interest, used against music. In order to be effective and efficient I tune my thoughts, tools and actions continuously. Computer user since 1993, write programs since 2003, self learner since childhood. I have experience in building custom software framework and reusable libraries.

Next I have outlined aspects of experience in projects I have been involved by scheme provided [here \(https://github.com/asd-and-Rizzo/asd-and-Rizzo.github.io/blob/master/cv\\_item\\_structure.md\)](https://github.com/asd-and-Rizzo/asd-and-Rizzo.github.io/blob/master/cv_item_structure.md).

## Projects:

### [ERP, accounting and management software for law firms \(http://thomsonreuters.com/3e/\)](http://thomsonreuters.com/3e/)

Working with denormalized database with constraints outlined in code and custom ORM. Working with XML as communication medium of client (UI, web api) and server. Working with custom IDE. Fixing bugs.

*Used:* MS SQL, IIS, XML, VB.NET

*Duration:* 07.07.2014-now

### **MS Office financial add ins suite: [Advanced Analytics](#)**

**[http://thomsonreuters.com/products\\_services/financial/financial\\_products/a-z/advanced\\_analytics](http://thomsonreuters.com/products_services/financial/financial_products/a-z/advanced_analytics)) and [Eikon for Office \(https://thomsonreuterseikon.com/blog/exploit-analytical-presentational-potential-thomson-reuters-eikon-microsoft-office-add\)](https://thomsonreuterseikon.com/blog/exploit-analytical-presentational-potential-thomson-reuters-eikon-microsoft-office-add)**

Developed financial and productivity tools integrated with MS Office, developed framework for integrated suite of office and desktop applications

*Details:* Developed software framework for creating unified customer experience across MS Office Add-ins and custom standalone applications used as basis by distributed teams. Integrated managed and native code, desktop and HTML and MS Office applications. Created documentation, did talks on customer side, coordinated with developers from several countries. Searched/refactored existing code, internal projects and solutions to fulfill new requirements as reusable components, did variability engineering, defined application programming interfaces. Evaluated, tuned and incorporated open source to speed up development. Developed custom module system capable loading modules in isolated asynchronous manner. Developed custom host for plugins running in separate service process accessed via local [IPC \(https://en.wikipedia.org/wiki/Inter-process\\_communication\)](https://en.wikipedia.org/wiki/Inter-process_communication). Implemented custom local IPC, settings storage, framework for user interface composition. Developed web data fetching, authentication; solved client side multiple login issues and auto-upgrade. Made fixes for thin client and multi user session scenarios, installed and used virtualization software to test on different setups, did automation. Made profiling and optimizations. Wrote code/logs/performance analysis scripts and diagnostics/productivity tools. Debugged multithreaded and multiprocess issues. Introduced [Behavior-driven development \(http://en.wikipedia.org/wiki/Behavior-driven\\_development\)](http://en.wikipedia.org/wiki/Behavior-driven_development). Developed software for linking data between Excel and Word. Developed financial data charting tool integrated with web sources and PowerPoint.

*Position:* Software Engineer - Lead Software Engineer

*Role:* developer, writer

*Organization:* [EPAM Systems \(http://www.epam.com\)](http://www.epam.com), [Thomson Reuters \(http://thomsonreuters.com\)](http://thomsonreuters.com)

*Team:* started from small end user functional team, become distributed team of changing size with many functional teams

*Used:* .NET 3.5-4.0, C#, OOP, [OOAD \(http://en.wikipedia.org/wiki/Object-oriented\\_analysis\\_and\\_design\)](http://en.wikipedia.org/wiki/Object-oriented_analysis_and_design), Refactoring, native Windows programming technologies, WPF, Mvvm, WinAPI, dependency injection (Unity and custom), XAML, C, COM, EntLib, MS Office extensibility (2003-2013, Word, PowerPoint, Excel), TDD, MS Tests, tests mocking, [BDD \(http://en.wikipedia.org/wiki/Behavior-driven\\_development\)](http://en.wikipedia.org/wiki/Behavior-driven_development), SpecFlow, multithreading, [VSTO \(http://en.wikipedia.org/wiki/Visual\\_Studio\\_Tools\\_for\\_Office\)](http://en.wikipedia.org/wiki/Visual_Studio_Tools_for_Office), source and bytecode analysis, [IPC \(https://en.wikipedia.org/wiki/Inter-process\\_communication\)](https://en.wikipedia.org/wiki/Inter-process_communication), WCF, MS-RPC, Mbq, WinDbg, Windows XP-8, Scrum, Jive The Hub, UML, VirtualBox, plotting/charting, packaging (3rd party and custom), TPL, Atlassian JIRA, FreeMind, TortoiseSVN, XML binary serialization, Visio, F#, Atlassian Confluence, packaging (NuGet, custom), Visifire charts, Mono.Cecil, protobuf-net, ATL, C++, VBA, HTML, MS Server 2008 RemoteApp, Rhino.Mocks, Autolt, OpenRepGrid, gtest

*Duration:* 02.2010-06.2014, full-time

## Open source

- <https://github.com/asd-and-Rizzo> (<https://github.com/asd-and-Rizzo>)
- [https://www.ohloh.net/accounts/Dzmitry\\_Lahoda](https://www.ohloh.net/accounts/Dzmitry_Lahoda) ([https://www.ohloh.net/accounts/Dzmitry\\_Lahoda](https://www.ohloh.net/accounts/Dzmitry_Lahoda))
- <https://gitorious.org/~asd-and-rizzo> (<https://gitorious.org/~asd-and-rizzo>)
- <https://www.codeplex.com/site/users/view/asdandRizzo> (<https://www.codeplex.com/site/users/view/asdandRizzo>)
- <https://code.google.com/p/en-ikvm-api/> (<https://code.google.com/p/en-ikvm-api/>)

Long term open sources outlined later as separate items.

*Used:* C#, .NET, C, code generation (T4 text templates, custom), F#, linear algebra, Octave, Rust, IKVM, git, Windows, XAML, XML, HTTP client, WPF, scripting, Linux, Python, COM, C++

*Duration:* 2009-now, part time

## Website security/forensics audit from server side perspective

Reverse engineered web site and database. Wrote scripts for automated security checks running on server. Communicated and consulted with different specialists. Evaluated requirements and planned implementation.

*Role:* auditor

Used: C#, .NET 4.0, PKI, ILSpy, MS SQL Server 2008, SharpDevelop, IIS, ASP.NET Web Forms modules, ASP.NET Web Forms, TrueCrypt, Tor, ProjectLibre

Duration: 07.2011-01.2013, freelance, part time

## University works: Music Information Retrieval (visualization and analysis)

Implementing intellectual musical player which visualizes and organizes music collection onto 2 dimensional space using features obtained from audio content. Building engine which learns what is "music" from audio collection provided using Hierarchical Temporal Memory.

Produced texts (<http://www.scribd.com/collections/4340277/bsu-by-2005-2010>)

Source code and experiments (<https://drive.google.com/folderview?id=0B2JxOi1f9p2zY0Z5TVZndjJ2MzA&usp=sharing>)

Team: supervisor Igor Heidorov (igorhmm at mail dot ru), idea and whole implementation are mine

Used: MATLAB, Numenta, scatter plot, PCA(Principal component analysis), MATLAB Builder NE, MIRTtoolbox, Python, FFT(Fast Fourier Transformation), KNN(K-Nearest Neighborhoods), HTM(Hierarchical temporal memory)

Duration: 10.2008-06.2010, part time

## Time Lapse Microscopy Capture Tool (<http://TimeLapseExp.codeplex.com>)

Created application for time-lapse microscopy

Certificates (<https://drive.google.com/folderview?id=0B2JxOi1f9p2zG4xeUJU25pRjg&usp=sharing>)

Role: developer

Organization: Institute of Physical Biology, transformed into [other](http://www.frov.jcu.cz/en/sks-frov-ju/skola-komplexnich-systemu) (<http://www.frov.jcu.cz/en/sks-frov-ju/skola-komplexnich-systemu>)

Team: 2 PhD students

Used: C#, .NET 3.5, Windows Forms, Olympus SDK, AForge, Visifire charts, NLog

Duration: 07.2008, 07.2009, intern

## Social network data analysis and visualization

Creating application which had to get info from email server, process it and visualize as graph of communications. Implementing business and data access layers.

Organization: [Itransition](http://www.itransition.ru) (<http://www.itransition.ru>)

Role: junior developer

Team: 3 junior developers, manager

Used: Java EE5, EJB 3, JPA 1, MAVEN, MySQL 5.1, ClearCase, ClearQuest

Duration: 08-10.2008, part time

## Woodworking machine controller

Created application which connected to woodworking machine and provided possibility to edit/store/execute sawing plans and change sawing machine setups.

Details: Created ad-hoc config file format parser, two threading, text window system with edit boxes/menus/labels/help, communication protocol with hardware port.

Source and docs archive (<https://drive.google.com/folderview?id=0B2JxOi1f9p2zNVZaV2pyTulaeU0&usp=sharing>)

Organization: [Stroydetali LLC](http://www.stroydetali.by/en) (<http://www.stroydetali.by/en>)

Role: programmer

Team: engineer, microcontroller programmer

Used: TMT Pascal, MS-DOS, ASM, LPT

Duration: 08-12.2006, part time

## Graduate database

Created application for storing/reporting data about graduates, with installer and user help. 2nd place on regional competition of school student's software

Organization: <http://logos.edu.minskregion.by> (<http://logos.edu.minskregion.by>)

Used: Borland Delphi 7, Rave Reports, SQL, InstallShield, HTML

Duration: 09.2004-03.2005, part time

## Education/Knowledge:

### Knowledge management

- [https://www.diigo.com/user/dzmitry\\_lahoda](https://www.diigo.com/user/dzmitry_lahoda) ([https://www.diigo.com/user/dzmitry\\_lahoda](https://www.diigo.com/user/dzmitry_lahoda))
- <http://asdandrizzo-se.blogspot.com/> (<http://asdandrizzo-se.blogspot.com/>)
- <http://www.dmoz.org/public/profile?editor=asdandrizzo> (<http://www.dmoz.org/public/profile?editor=asdandrizzo>)
- <https://drive.google.com/folderview?id=0B2JxOi1f9p2zV1IDWDk2VWJVLWM&usp=sharing> (<https://drive.google.com/folderview?id=0B2JxOi1f9p2zV1IDWDk2VWJVLWM&usp=sharing>)
- <http://www.slideshare.net/asdandRizzo> (<http://www.slideshare.net/asdandRizzo>)

Used: tagging, mind and concept maps, notes, catalogs, solving exercise

Duration: 2005-now

### Lifelong learner

<https://www.coursera.org> (<https://www.coursera.org>)

As finished: Machine Learning, Model Thinking, Data Science, Functional Programming Principles in Scala

[Certificates](https://drive.google.com/folderview?id=0B2JxOi1f9p2zTUgtYV9mUkhZVHM&usp=sharing) (<https://drive.google.com/folderview?id=0B2JxOi1f9p2zTUgtYV9mUkhZVHM&usp=sharing>)

Duration: 04.2012-02.2014, part time

## **Belorussian State University, [Faculty of Radiophysics and Computer Technologies](http://rfe.by/en) (was Radiophysics and Electronics) (<http://rfe.by/en>)**

Graduated university with Bachelor's degree, Major Radiophysics - 01.04.03, GPA: 6/10;

*Documents*

Duration: 2005-2010, full time

## **Software engineering courses**

[ScienceSoft ".NET Framework" course](http://www.scnsoft.com) (<http://www.scnsoft.com>)

Finished course of lectures devoted to .NET Framework. Implemented test web site for creating custom entities by Administrators and adding exemplars of them by Users. Entities have had variable number of fields (images, strings and numbers).

[Certificate](https://drive.google.com/file/d/0B2JxOi1f9p2zb1ZkTDREUWU0SGs/edit?usp=sharing) (<https://drive.google.com/file/d/0B2JxOi1f9p2zb1ZkTDREUWU0SGs/edit?usp=sharing>)

Used: .NET 2.0, ADO.NET, ASP.NET, ASP.NET Membership, SQL Server

Duration: 11.2008, part time

[Itransition "Industrial software development" course](http://www.itransition.ru/career/training/software-development) (<http://www.itransition.ru/career/training/software-development>)

Finished course of lectures devoted to testing, collaboration, Java, .NET, Object Oriented Programming (OOP), Design Patterns, Object Relational Mapping (ORM) and web development.

Implemented test tasks and web site to add/store/search tagged technical documents.

Used: .NET 2.0, ASP.NET, ASP.NET Membership, NHibernate, SQL Server, tinyMCE text editor, MS AJAX, NUnit, CodeDom

Duration: 04.2008, part time

## **Languages**

- *English*: fluent reading/writing technical texts, working spoken, B2/Upper intermediate.
- *Russian, Belarusian*: native.

## **Other**

I learn math, algorithms and models of nature. I have driver licence type "B". Married with Maryna Lahoda, PhD. I have [next PC](http://valid.canardpc.com/2639433) (<http://valid.canardpc.com/2639433>). I was born in 1988 year AD. I do not - drink alcohol, read/listen/watch fiction texts/films; except rare cases. I listen non fiction audio books. I do yoga. Learning to cook simple and healthy food. I believe in (politically, religiously): openness, transparency, science. Can find me in internet via [next query](http://www.google.com.by/search?hl=be&q=asdanRizzo+OR+%22asd.and.Rizzo%22+OR+%22asd-and-Rizzo%22+OR+%22asd_and_Rizzo%22+OR+%22Dzmitry+Lahoda%E2%80%9D+OR+%22dzmitry.lahoda%22&btnG=%D0%A8%D1%83%D0%BA%D0%B0%D1%86%D1%8C&meta) ([http://www.google.com.by/search?hl=be&q=asdanRizzo+OR+%22asd.and.Rizzo%22+OR+%22asd-and-Rizzo%22+OR+%22asd\\_and\\_Rizzo%22+OR+%22Dzmitry+Lahoda%E2%80%9D+OR+%22dzmitry.lahoda%22&btnG=%D0%A8%D1%83%D0%BA%D0%B0%D1%86%D1%8C&meta](http://www.google.com.by/search?hl=be&q=asdanRizzo+OR+%22asd.and.Rizzo%22+OR+%22asd-and-Rizzo%22+OR+%22asd_and_Rizzo%22+OR+%22Dzmitry+Lahoda%E2%80%9D+OR+%22dzmitry.lahoda%22&btnG=%D0%A8%D1%83%D0%BA%D0%B0%D1%86%D1%8C&meta)).