

**YAUHEN YAKIMOVICH, MSC.**

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**Education**

<b>2008 - 2009</b>	Integrated Phd Program in Mathematics, Jacobs University, Bremen (unfinished)
<b>2005 - 2008</b>	Graduate School at Belarussian State University of Informatics and Radio electronics (BSUIR), Faculty of Computer Networks and Systems , Department of Software and IT (Avg: 4,5) <sup>1</sup>
<b>2004 - 2005</b>	Master course at BSUIR, Faculty of Computer Networks and Systems, Department of Software and IT. Master ("Magister") Thesis: "Models, methods and software of Internet-based information system organization for data search and exchange" (Avg: 4,72)
<b>1999 - 2004</b>	Dipl. Ing. in software development, BSUIR, Faculty of Computer Networks and Systems., Department of Software and IT, Bank systems specialization. Diploma Thesis: "Content Management System" (Avg: 4,57)
<b>1988 - 1999</b>	Gymnasium

<sup>1</sup> where 5.0 grade is excellent

## Work Experience

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<p><b>2008-2009</b></p>	<p><b>Jacobs University.</b> Bremen (Part-time job)</p> <p><b>Responsibilities:</b> Mathematics department's website development (redesign) and support, Symbolic programming teaching assistance</p> <p><b>Tools:</b> PHP, Mathematica 6.0</p>
<p><b>2008</b></p>	<p><b>Generation P Ltd.</b> Minsk (Full-time job)</p> <p><b>Position:</b> System Architect</p> <p><b>Responsibilities:</b> development, architecture and algorithms design, documentation and UML design</p> <p><b>Tools:</b> Business Process Modeling : JBPL, Eclipse, CVS, Java 1.6, JSP, Java Faces, Hibernate, MySQL, JUnit, XML, XSL, SOA, Service Bus Messaging</p>
<p><b>2005 - 2008</b></p>	<p><b>BSUIR,</b> Dept. of Computer Networks and Systems (Part-time job)</p> <p><b>Position:</b> Teaching Assistant</p> <p><b>Responsibilities:</b> Teaching activities on laboratory classes in OOAD and other, "Software and IT" department research and development activities, preparation and giving a lecture course on functional and logical programming (Lisp, Prolog).</p>
<p><b>2004 - 2005</b></p>	<p><b>SaM-Solutions Ltd.</b> Minsk (Full-time job)</p> <p><b>Position:</b> Quality assurance engineer</p> <p><b>Responsibilities:</b> development of Marathon-based automated Java GUI testing tool with jython scripts</p> <p><b>Tools:</b> CVS, IDEA, Java 1.5, jython, JRMI, JDBC, Oracle, J-Boss, EJB, TestUnit</p>
<p><b>2002 - 2004</b></p>	<p><b>DeskTopHosting Inc.</b> USA (Remote, Part-time)</p> <p><b>Position:</b> Network security analyst</p> <p><b>Responsibilities:</b> development, system administrating</p> <p><b>Tools:</b> UNIX, LINUX, Windows Server, Active Domain Directory, ipf, iptables, SNOR, SpamAssasian, CPanel, QoS, shell-scripts, C, Tcl, Perl, Python, Php, MySQL, PostgreSQL, MSSQL, SQL</p>

<b>2002 - 2004</b>	<p><b>IRC.by.</b> Minsk (Part-time project)</p> <p><b>Responsibilities:</b> co-founder, development, team-leading</p> <p><b>Tools:</b> CVS, Visual Studio 7.0 (.NET 1.1 Framework, C# 1.2 specification), .NET, C/C++, sockets, UNIX sockets, UNIX multitasking (processes, threads), Cross Platforming architecture</p>
<b>April 2002 – September 2002</b>	<p><b>ISP Unika.</b> Minsk (Part-time job)</p> <p><b>Responsibilities:</b> system/network administrating and planning</p> <p><b>Tools:</b> Unix Shell scripting languages (like sh, csh, bash, etc), Perl, TCP/IP Stack of services, Mailing Systems (sendmail, exim), pppd (authorization, crypto graphics), dhcp, snmp, dns, etc.</p>
<b>2001 - 2002</b>	<p><b>Waterline Studio.</b> Minsk (Part-time job)</p> <p><b>Responsibilities:</b> management, development, web-design</p> <p><b>Tools:</b> PERL, PHP, JSP, ASP, Javascript, HTML and CSS coding, Delphi, C++, ActionScript, MySQL, MSSQL, TCP/IP, HTTP, FTP, DNS, SMTP, POP3, NNTP, IMAP, S</p>
<b>2001 - 2002</b>	<p><b>Belarusian State Agro-Technical University.</b> Minsk (Part-time)</p> <p><b>Responsibilities:</b> system/network administrating</p> <p><b>Tools:</b> Windows 3.x, 95/98, NT, Novell Dos, UNIX (Free BSD, LINUX) 10MB Ethernet, Fast Ethernet, SNMP, IBM PC, TCP/IP, IPX/SPX, NETBIOS, MRTG</p>
<b>2000 - 2001</b>	<p><b>BSUIR , part-time research projects:</b></p> <ul style="list-style-type: none"> <li>• “Belagroprombank” web-site development</li> <li>• Development of client-server application: Document circulation Management System</li> <li>• Adaptation of client-server application under MS Windows. Development of graphic interface (for «Social protection of population Found»).</li> </ul> <p><b>Tools:</b> Delphi, PERL, PHP, Javascript, HTML coding, ASP, Windows 3.x, 95/98, NT, 2000, ASP, ODBC, SQL, MSSQL, TCP/IP, HTTP, FTP</p> <p>ErWin, BpWin, VC++, DELPHI, PERL, Windows 3.x, 95/98, NT, 2000, ODBC, BDE, SQL, MSSQL, TCP/IP</p> <p>Delphi, SQL, BDE, Oracle, Windows 3.x, 95/98, NT</p>

*Remark: some non-recent and/or part-time jobs/projects are simply omitted for space saving purposes with periodical update of the document. Please contact me directly for certain skill-oriented experience details.*

## Skills

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### ***Programming Languages<sup>2</sup>:***

Assembler x86/AT&T, **C, C++, C#, Java, Delphi**, Perl, **Python**, Ruby, Tcl, **SQL, UML**, VHDL,

**Pascal**, Fortran, **Lisp**, Prolog, Basic, VB, Oberon, gntee, Erlang, Haskell, REXX, Modula2,

ASP, **ASP.NET**, JSP, **PHP, HTML, XML, WSDL, Javascript**, ActionScript, **bash, csh, awk, sed**

### ***Processors architecture:***

Microprocessors: (CISC) Intel x86, AMD x86 | (RISC) ARM, Alpha, SPARC

Embedded devices: MSP Texas Instruments, Motorola

### ***Operational systems:***

Unix: FreeBSD, NetBSD, OpenBSD, Solaris, Minix

Linux: LFS, Debian, Ubuntu, Suse, Red Hat, Mandrake, Slackware

Windows: 3.11, 95\98, NT\2000\XP

Other: DOS, OS/2 Warp\Aurora, Novell OS, Mac OS, BeOS

### ***Development environments:***

IDE: Visual Studio 2003/2005/2008, Eclipse, IDEA, Borland Builder Delphi/C++/Java, Eclipse,

KDevelop, Unix, gdb, Vim, autoconf, automake

CodeStyling & documentation: Visual Studio, inline, vim, oxygen, JavaDoc, PHPDoc

### ***Data bases:***

DBMS: MySQL, MSSQL, DB2, Oracle, Informix, PostgreSQL | DB: MS Access, Paradox dbf, dbm, xml

Access technologies: ODBC, BDE, ADO.NET, JDBC | Application Servers: J-Boss (EJB)

### ***Technologies:***

Microsoft .Net, J2EE, Mono .Net | OOP, OOAD, AOP, AOSD, Design patterns, MVC, RUP (Rational Rose), MPI\Open

Administration: Microsoft Active DC, DNS, Firewall, IDS | Version Control Systems: Source safe, CVS, SVN

Quality and Assurance: UnitTesting (Regression Testing), Q-Run, Mercury Win-Runner, Marathon, AutoIt

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<sup>2</sup> Languages with highly strong knowledge and rich practice background of them are emphasized

Designing: (CASE) Rational Rose, ErWin, BpWin, AgroUML

Distributed computing technologies: XML RPC, DCOM+, ActiveX, CORBA, Java RMI, MPI

Web-technologies: CGI, CSS, SOAP, DHTML | XML (DOM), XSL, XSLT, XPath, XQuery, RSS, RDF, AJAX, JQuery | Web-services, WSDL | Apache, IIS, IBM WebSphere, Boa

Visualization and 3D: GDI, GDI+, OpenGL, DirectX

Mathematical program packages: Matlab, Mathematica, Mathcad, Maple, Statistica

### ***API and object-oriented Frameworks:***

Unix, WinAPI | STL, ATL | EJB, Hibernate, Doctrine

MFC, Windows.Forms, Delphi, Java Swing, NetBeans, GTK, GTK+, GTK#,

ASP.NET, Java Struts, Perl CPAN, PHP Pear, Zend, Zope, Smarty

### ***Computer networks:***

Architectures: RS-232, Frame Relay, SONET/SDH, ATM (B-ISDN, DSL), MPLS, Ethernet

Protocols: X.25, IPX, NetBIOS (SMB, LanMan),

Internet (ip, icmp, tcp, udp, rdp, gre, pptp | rip2, bgp | echo, smtp, ftp, telnet, nntp, dns, http, pop3, imap, snmp, radius, nfs, NetFlow)

Equipment: Switches of level 3\4, Routers, /server stations IBM (S/390)

| Cisco, 3com, D-Link, Intel, Zyxel, Nortel Networks, Lucent, Alcatel

## **Languages Spoken**

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<b><i>English</i></b>	fluent
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<b><i>German</i></b>	fluent
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<b><i>Polish</i></b>	spoken
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<b><i>Russian</i></b>	native
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<b><i>Belarusian</i></b>	native
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## **Extra courses, certificates, honors**

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***2009, January***

| MPI\OpenMP workshop, Bremen (*Certificate*)

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<b>2008, May</b>	ETS certified center, Kiev, iBT TOEFL Test  Results: 99 out of 120
<b>2003, November</b>	Zentrale Mittelstufenpruefung, Goethe Institut Minsk, Zeugnis: 021623
<b>1999 - 2003</b>	Goethe Institut Minsk
<b>2003, September</b>	BSUIR, Interpreter consultant in scientific and technical literature  interpretation and abstracting majoring in the English  language.
<b>2001 – 2003</b>	BSUIR extra course in scientific and technical literature interpretation and abstracting

## Research Interests

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*Loseless data compression* (rarefied data compression, best data compression with context-mixing and PPM methods; applications of information theory, topology, metric spaces, probability theory, statistics, ergodic theory, combinatorics, algorithmic entropy and complexity (Kolmogorov complexity), nearest neighbor analysis, theory of algorithms, stochastic processes, dynamical systems, cellular automaton, fractals)

*Computer networks and distributed systems* (scheduled\unscheduled data commutation, optimization of network traffic load balancing schemes, QoS, utilization maximization, network conjecture avoidance, resource sharing and transport problems, peer-to-peer architectures, network tomography, file sharing and search algorithms; application of queuing theory, schedule theory, operations theory, probability theory, computer-based simulations and mathematical modeling, dynamical systems optimization, traffic engineering theory)

*Artificial intelligence* (unsupervised classification, cluster analysis and data clustering algorithms, pattern recognition, data mining, automated proof building systems, expert systems and decision support systems, combinatorial logic, lambda calculus, symbolic computation, computer linguistic, semantical text analysis, knowledge representation models)

*Software quality* (reliability theory, complex systems theory, software metrics, new methods of functional, regression, performance and usability testing, including statical and dynamical approaches, computational process modeling, automated (unsupervised) testing)

## Research Experience

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<b>2008</b>	Research project: "Rarefied data compression method" with application for network data transfer.
<b>2008</b>	Research project: "Search systems and file exchange analysis using P2P data

	transfer"
<b>2008</b>	Research project: «Fast compression of rarefied data»
<b>2007</b>	Research project: «Program architecture of autonomous components»
<b>2007</b>	Research project: « Software efficiency estimation with time division»
<b>2006</b>	Research project: «Predicting network traffic asymmetric properties»
<b>2005</b>	Research project: «Analysis of Edutella educational system network services»
	Research project: «Scientific and educational system model for data search and exchange»
<b>2005</b>	Master Thesis: "Models, methods and software of Internet-based information system organization for data search and exchange"
<b>2004</b>	Development of systems with mutual access to information resources for creation of common information field while working on research project «Analysis of the problem of mutual access to Belarusian banking system information resources with the aim of general information field creation»
<b>2004</b>	Diploma Thesis: "Content management system" (with practical application on an example of a web-site of Institute of Information Technologies BSUIR)
<b>2000 - 2004</b>	Participating in five Research & Development projects at BSUIR. Composing technical reports and documentation.

## Publications

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- Ivasenko, M. A, Yakimovich, E.L. "Files search and exchange systems analysis using P2P data transmission"//Modern information computer technologies: materials international scientifically-practical conference mcIT-2008 (April, 21st-24th, 2008, Grodno, Belarus), - Grodno: GrSU, 2008
- Eugeny L. Yakimovitch "Rarefied data compression method" // conference materials: mcIT-2008, Grodno, 2008
- Yakimovich, E.L. «Fast compression of rarefied data» // New mathematical methods and computer technologies in designing, manufacture and scientific researches: Materials of XI Republican conference of students and post-graduate students, Gomel, March, 2008 - Gomel: GSU, 2008.
- Yakimovich E.L. « Software efficiency estimation with time division» // Modern radio electronics: scientific researches and a professional training: Materials of international theoretical and practical conferences, MSHRC, Minsk, April, 10-11th, 2007: in 4 parts / Ministry of Education of Belarus, MSHRC; under the editorship of Prof. N.A.Tsyrelchuka. - Minsk: MSHRC, 2007. - part 4. - p 30-33.

- Gorbadej, A. P, Yakimovich, E. L. «Program architecture of autonomous components» // Modern radio electronics: scientific researches and a professional training: Materials of international theoretical and practical conference, MSHRC, Minsk, April, 10-11th, 2007: in 4 parts. / Ministry of Education of Belarus, MSHRC; under the editorship of Prof. N.A.Tsyrelchuka. - Minsk: MSHRC, 2007. - part 4. - p 30-33.
- Yakimovich, E.L., Bahtizin, V.V. «Software statistical testing» // Remote training - Educational environment of the XXI-st century: materials of VI International scientific-methodical conference (November, 22-23nd, 2007). - Minsk: BSUIR, 2007. - 420 p.
- Yakimovich E.L., Bahtizin V.V. «Analysis of Edutella educational system network services»//Remote training - the Educational environment of the XXI-st century: materials international theoretical and practical conferences, November, 10-11th, 2005. - Minsk: BSUIR, 2005 - 456p.: p 386-388.
- Yakimovich E.L. «Predicting network traffic asymmetric properties» // IX Republican scientific conference of students and post-graduate students «New mathematical methods and computer technologies in designing, manufacture and scientific researches» March, 13-15th 2006r.: [materials] / editors.: D.G. Lin [etc.]. - Gomel: GSU of F.Skoriny, 2006. - 308p.: p 290-291.
- Yakimovich, E.L., Bahtizin, V.V. «Scientific -educational system model for data search and exchange»//Actual problems of radio electronics: scientific researches, professional training: Scientific articles collection (following the results of work MSHRC, Minsk, June, 2-3nd, 2005) in part 2 of 3 /Ministry of Education of Belarus, MSHRC, 2005