

CURRICULUM VITAE

PERSONAL INFORMATION

Name Natallia Rasadka
 Date of birth April 18, 1980
 Citizenship Belarus
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EDUCATION

2003-2008 PhD
 The University of Trento

1997-2002 MS
 Department of Applied Mathematics and Computer Science of
 Belarus State University (GPA: 4.94 of 5.00)

1995-1997 (GPA: 4.72 of 5.00)
 Lyceum of Belarus State University
 (High School with bias in Mathematics, Physics and Computer
 Science)

LANGUAGES

Russian, Belarusian Native language
 English, Italian Fluent spoken and written

SELECTED SKILLS

	Advanced	Good	Fair
Academic	Access control	Publishing by third-parties	Privacy preserving
	Multilevel security	DB-to-XML transformation	Federated databases
	Polyinstantiation	Model-driven security (TROPOS)	Conceptual modeling
	XML querying	Web-services	Boolean reasoning, logics
Programming	Java (JDBC, EJB, Servlets)	C++ (COM, MFC, WinAPI)	
	Scripting: ASP/JSP/JavaScript	T-SQL, PL SQL	
Technological	XML/XPath/XSLT/HTML	Modeling tools: Rational Rose, MS Visio, Smart Draw, SI* for TROPOS modeling	OLAP: MS SQL Server OLAP Services
	Application Servers: BEA WebLogic/ JRun / Jakarta Tomcat	RDBMS: MS SQL Server, Oracle, MySQL	SOAP, XML for Analysis, MDX (Multidimensional expressions)
	Web-services implementation with Axis 2	Web-services orchestration in ActiveBPEL	

RESEARCH INTERESTS

XML security views, secure query rewriting, multilevel security, access control, policies.
Untrusted application service providers, semantically-aware policies, security in distributed XML databases
Web-services, security patterns

PUBLICATIONS

1. A. Benameur, F. Massacci, N. Rassadko: "Security Views for Outsourced Business Processes", Workshop on Secure Web-Services (SWS'08) in conjunction with CCS'08.
2. N. Rassadko: "Query Rewriting Algorithm Evaluation for XML Security Views" In Proceedings of Workshop on Secure Data Management (SDM'07) held in conjunction with VLDB'07
3. N. Rassadko: "Policy Classes and Query Rewriting Algorithm for XML Security Views" In Proceedings of the IFIP TC11/WG11.3 20th annual working conference on Database and application security (IFIP'06), pp. 104-118, 2006.
4. G. Kuper, F. Massacci, N. Rassadko: "Generalized XML Security Views" In Proceedings of the tenth ACM symposium on Access control models and technologies (SACMAT'05), pp. 77-84, 2005

TALKS

1. Towards BPEL Views. Internship talk at SAP. Sophia Antipolis, France, September 2007
2. Query Rewriting Algorithm Evaluation for XML Security Views. Vienna, Austria, September 2007
3. Policy Classes and Query Rewriting Algorithm for XML Security Views. Conference on Database and application security. Sophia Antipolis, France, July 2006
4. Semantic XML Views (poster presentation). 2K* Symposium, Trento, Italy, September 2005.
5. Generalized XML Security Views. ACM symposium on Access control models and technologies. Stockholm, Sweden, June 2005
6. Query Rewriting over Generalized XML Security Views. Meeting of Spada@Web project. Milan, Italy, May 2005.

PROGRAM COMMITTEE

1. IADIS International Conference on Applied Computing 2008
2. IADIS International Conference on Applied Computing 2007
3. IADIS International Conference on Applied Computing 2006

SCIENTIFIC PROJECT PARTICIPATION

1. 2008-current SENSORIA
2. 2008-current MASTER
3. 2007-current TOCAI
4. 2006-2007 SERENITY: security patterns
5. 2006-2007 S3MS: contract-based security for mobile systems
6. 2004-2005 Spada@Web: security for geo-spatial data

SCIENTIFIC REVIEWING

1. ACM Transactions on Information and System Security (TISSEC)
2. International journal "Information Systems"
3. International journal "Database Security", selected papers of DBSEC'06 Conference
4. IADIS International Conference on Applied Computing 2006
5. IADIS International Conference on Applied Computing 2005
6. International Conference on Information and Communications Security 2004

IN-SERVICES AND OTHER TRAININGS

1. Internship at SAP. Sophia Antipolis, France. July 2007-September 2007

2. Workshop Secure Data Management (SDM'07), Vienna, Austria, September 2007. In conjunction with VLDB'07
3. IFIP TC11/WG11.3 20th annual working conference on Database and application security (IFIP'06), Sophia Antipolis, France, July 2006
4. 2K* Symposium, Trento, Italy, September 2005.
5. ACM symposium on Access control models and technologies (SACMAT'05), Stockholm, Sweden, June 2005
6. *PhD volunteer* at the International Symposium on Applications and the Internet (SAINT'05), Trento, Italy, December 2004
7. International Summer School on Information and System Security (ISS'04), Como, Italy, September 2004
8. International Summer School on Foundations of Security Analysis and Design (FOSAD'04), Bertinoro, Italy, August 2004.

GRANTS AND AWARDS

1. Grant for research from MASTER project
2. Grant for PhD research at the University of Trento from TOCAI project, November 2007-February 2008
3. Grant for internship at SAP from SERENITY project, July 2007-September 2007
4. Grant for PhD research at the University of Trento from SERENITY project, November 2006-October 2007
5. Grant for PhD research at the University of Trento from ICT International School, November 2003-October 2006
6. Grant for Internship Stage at the University of Trento, March-May 2003
7. Diploma with Honor from Belarusian State University, 2002

TEACHING

1. Basi di Dati for 2nd year students: laboratories on PostgreSQL, Fall 2008
2. Sistemi Informativi (XML, OLAP, Data Mining, advanced chapters in RDBMS) for 3rd year students, Spring 2007, Spring 2008
3. Security (SI* modeling, access control models, XMACL, ConSpec, security architecture, Java security, .NET security) for 2nd year master students, Spring 2007

INDUSTRIAL EXPERIENCE

July 2007 – September 2007

SAP

www.sap.com

Job Position Intern/Developer/Researcher

Project SERENITY (www.serenity-project.org)

Product E-business case study, Loan Origination Process

Work As an Intern and Developer I was responsible for

description

- Database design
- Design and implementation of WSInternalRating and WSLoanCalculation
- Incorporation of JBOSS pricing roles in the services mentioned above
- Web-services orchestration in ActiveBPEL designer
- Deployment of Web-services and their orchestration on TomCat
- Creating GUI with JSPs

As a Researcher

- I performed brainstorming on patterns possibly applicable to the scenario
- The result of the brainstorming was submitted to SAC'08
- I proposed the initial version of Separation-of-Duties enforcement at the layer of Service Oriented Architecture by means of BPEL views

Tools Eclipse, ActiveBPEL Designer
Technologies Java, Web-Services with Axis 2, ActiveBPEL 4, Tomcat 5.0, MySQL, JSP, JBOSS rules

June 2003 – November 2003

EPAM Systems

www.epam.com

Job Position Developer/System Architect
Customer BRIO (<http://www.brio.com>)

Product Brio Installer

Work description As a Software Developer and System Architect I was participating in design and development of Installer for BRIO Performance Suit.

As a developer I was responsible for time bomb licensing, usage tracking and log tracking. As a system architect I should have communicated with customer, performed requirements evaluation, design and documentation of system behavior.

- Designed, developed and implemented time bomb for installation, startup and runtime use cases.
- Designed, developed and implemented License Key Extension Tool (used for extension of expired license).
- Added log4j logging.

Tools NetBeans v3.5, Rational Rose, InstallShield 4.5 multiplatform
Technologies Java, JavaBeans, UML, log4j, XML

March 2003 – May 2003

University of Trento

www.dit.unitn.it

Position Internship Student/Developer/Researcher

Subject A Fine-grained Access Control Systems for XML document.

Work description As an Internship Student I attended the following courses:

- "Logic for knowledge representation and reasoning" (by Luciano Serafini, University of Trento, Italy)
- "Semantic foundations for computer and network security" (by Roberto Gorrieri, University of Bologna, Italy)

As Researcher and Developer I performed the following:

- Investigated a fine-grained access control for XML documents and SOAP E-Services
- Developed prototype of transformation source XML documents to secure XML documents according to user rules defined either on XML or DTD level.

Tools NetBeans 3.4.1
Technologies Java, XML, DTD, DOM, XPath, SOAP

September 2002 – February 2002

EPAM Systems

www.epam.com

Job Position Software Developer
Customer SBLI, USA (<http://www.sbli.com>)

Product SBLI Agent Center

Work description As a Software Developer I participated in migration from ASP platform to J2EE platform of web-based application designed for management of insurance operations.

- Designed and developed business objects for modules "Agent Enrollment", "Profile Administration"
- Designed and developed business object for sending mails.
- Created login screen with authentication business object.

- Design of JSP-pages is improved with CSS; GUI and code layers are separated.

Databases MS SQL Server 2000
Tools JBuilder 5
Technologies Java, JSP, JavaScript, HTML (+CSS), XML, JDBC, JavaMail

January 2002 – August 2002
EPAM Systems LLC
www.epam.com

Job Position Software Developer/System Architect
Customer EPAM (<http://www.epam.com>)
Product EPAM Star Reporter
Work description EPAM Star Reporter is a J2EE application for web based ad-hoc OLAP analysis. Star Reporter uses one of the relation databases (Oracle, MS SQL Server or Sybase) as Business Data storage and user modifiable Metadata layer for defining data structure.
As a Software Developer and System Architect I performed integration of EPAM Star Reporter with Microsoft SQL Server 2000 Analysis Services.

- Designed architecture of integration.
- Performed coding of SOAP bridge between EPAM Star Reporter and Microsoft Analysis Services.
- Added XML for Analysis (Microsoft standard for multidimensional databases access) support to EPAM Star Reporter
- Added XSLT support to EPAM Star Reporter.
- Modified XSLT file from Microsoft XML to Xerces XML standard.
- Coded support of Microsoft Analysis Services metadata in EPAM Star Reporter.
- Coded MDX (Multidimensional Expressions) query building module.

Databases Microsoft OLAP, Oracle
Tools NetBeans 3.2.1, JRun 3.0, Bea WebLogic 6.0, Microsoft SQL Server 2000 Analysis Services
Technologies XSLT, MDX, OLAP, XML for Analysis, SOAP, HTTP, JSP, Java

September 2001 – June 2002

Research Institute of the Ministry of Economics of the Republic of Belarus

Role Research Assistant/Developer

Subject Vectorial discrete optimization problem solvability with linear criterion convolution

Work description

- Discovered discrete optimization multicriterion problem class unsolvable with linear criterion convolution (LCC) in terms of strong Slater optimality.
- Proved insolubility of quadratic multicriterion assignment problem and three-index occupancy production problem with LCC in terms of strong Slater optimality and Pareto optimality.
- Analyzed well-known solvability tests.
- Obtained new solvability sufficient conditions for multicriterion problem with finite aggregate of vector estimations with (LCC) in terms of Slater optimality and Pareto optimality.
- Developed and implemented polynomial algorithm to find LCC insolubility in terms of Pareto and strong Slater optimality of bicriterion problem with finite set of vector estimations.

Technologies Java

Algorithms Implemented: Convex Hull, Scrambling, Quick Sort, Hashing