# RESUME



Svetlin I. Nakov

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#### Education

Ph. D. in Computer Science, Sofia University, Sofia, 2010

M. Sc. in Distributed Systems and Mobile Technologies, Sofia University, 2005

B. Sc. in Computer Science, Sofia University, 2003

High-School of Mathematics and Natural Sciences, Veliko Tarnovo, 1999

# **Employment**

Nov 2013 – Present	Co-Founder, Training and Inspiration Manager, Software University (SoftUni.bg)
Feb 2010 – Oct 2010	Part-time Software Engineering Lecturer, <u>Technical University – Sofia</u>
Nov 2009 – Nov 2013	Manager Technical Training, Telerik Corp. (Telerik Software Academy)
Mar 2009 - Nov 2009	Development Manager, Intelligent Software Consulting (ISC)
Nov 2007 – Mar 2013	Managing Partner, Consulting and Information Technology Agency (CITA)
Feb 2007 – July 2007	Part-time Computer Science Lecturer, New Bulgarian University
Jun 2005 – Mar 2009	Director Training and Consulting Activities, <u>National Academy for Software Development (NASD)</u>
Apr 2004 – Present	Chairman, Bulgarian Association of Software Developers (BASD)
Mar 2004 – Aug 2005	Education Activities Associate, Microsoft Research, U. K.
Jul 2003 – Jan 2004	IT Consultant, PowerPartner
Dec 2002 – Jun 2003	Senior Software Engineer and IT Consultant, TechnoLogica
Mar 2002 – Nov 2002	Senior Software Developer, <u>Saga Technology</u>
Oct 2000 – Sep 2013	Part-time Computer Science Lecturer, Sofia University "St. Kliment Ohridski"
May 2000 – Jan 2002	Master Software Engineer, Musala Soft
Jul 1999 – Apr 2000	Software Developer, ComSoft
Oct 1999 – Mar 2000	Software Developer, FoxWare
Sep 1998 – Dec 1998	Software Developer, ArtCom
May 1996 - Sep 1998	Software Developer, 4M

# **Projects**

#### **Software University Training Courses** (Nov 2013 – now)

**Description:** Design, inspire, manage and operate the training activities in the largest private university for software engineering and IT in Bulgaria – Software University (SoftUni) (<a href="https://softuni.bg">https://softuni.bg</a>). Design the training curriculum and training programs, design the courses and teaching materials (presentations, live demo code, homework assignments, teamwork project assignments, exams, etc.), manage the trainer team, the development team and partially the administration, marketing and sales teams. Teach the most of the training courses at SoftUni: C# Basics, Java Basics, HTML & CSS, JavaScript Basics, PHP Basics, Teamwork and Personal Skills, Object-Oriented Programming, High-Quality Code, JavaScript OOP, JavaScript Libraries, Angular JS, Databases and ORM, Web development, Data Structures and Algorithms and many others.

**Technologies:** C#, .NET, Java, HTML, CSS, Bootstrap, JavaScript, PHP, OOP, Databases, SQL, SQL Server, MySQL, MongoDB, Entity Framework, ASP.NET MVC

**Telerik Software Academy** (November 2010 – November 2013)

Description: Design, inspire, build, manage and operate the largest training center for software engineers in

Bulgaria – Telerik Software Academy (<a href="http://academy.telerik.com">http://academy.telerik.com</a>). Started with 100 trainees in 2010 and reached 2000+ trainees onsite in 2013. Content creator and technical trainer in many practical software development courses: C# Programming – Part I and Part II, HTML, CSS, Knowledge Sharing and Team Working, Object-Oriented Programming (OOP), High-Quality Code, JavaScript Programming, Data Structures and Algorithms, Database Systems, Web Services & Cloud, ASP.NET Web Forms, ASP.NET MVC.

**Technologies:** C#, .NET, JavaScript, Databases, SQL, SQL Server, MySQL, MongoDB, Entity Framework, ASP.NET Web Forms, ASP.NET MVC

#### Telerik Algo Academy (April 2012 – October 2013)

**Description:** Design, inspire, build and manage the largest training center for competitive programming in Bulgaria called Telerik Algo Academy (http://algoacademy.telerik.com).

Technologies: C++, C#, data structures, algorithms

### C# Programming Fundamentals Book (November 2011 – September 2013)

**Description:** Managed a team of over 80 contributors (authors, translators and editors) in writing and translating to English an open-source computer programming book for beginners. In its 1122 pages the book covers the fundamentals of computer programming, data structures and algorithms, object-oriented programming and high-quality code with examples in C#. Originally written in Bulgarian language and later translated and adopted to English. Official web site: http://www.introprogramming.info/english-intro-csharp-book/.

Technologies: C#, data structures, algorithms, object-oriented programming, high-quality code

#### **Telerik Kids Academy** (November 2011 – October 2013)

**Description:** Organize and build a chain of training centers called Telerik Kids Academy (<a href="www.telerik-kids.com">www.telerik-kids.com</a>) for teaching kids (2<sup>nd</sup>-6<sup>th</sup> grade in the elementary school) in computer programming fundamentals in 20 Bulgarian towns in the period 2011-2013. The courses cover the basics of programming and algorithms with C++.

Technologies: C++, Code::Blocks, data structures, algorithms, object-oriented programming, high-quality code

#### Telerik School Academy (November 2010 – October 2013)

**Description:** Inspire, build and manage the largest software development training center for school students in Bulgaria – Telerik School Academy (<a href="http://schoolacademy.telerik.com">http://schoolacademy.telerik.com</a>), conducted courses in programming, software development, databases, Web development (ASP.NET and PHP), mobile development, desktop development, software engineering and software technologies.

Technologies: C#, .NET, HTML5, PHP, ASP.NET, Databases

# Introduction to Programming with C# Book (December 2010 – July 2011)

**Description:** Managed a team of 24 authors and 15 editors in writing an open-source computer programming book for beginners. In its 1116 pages the book covers the fundamentals of computer programming, data structures and algorithms, object-oriented programming and high-quality code with examples in C#. Written in Bulgarian language. Official web site: http://www.introprogramming.info/intro-csharp-book/.

**Technologies:** C#, data structures, algorithms

## ID Cards Scan & OCR System (July 2009 – October 2009)

**Description:** Software for scanning personal ID documents (ID cards, passports, driving licenses, automobile registration documents, etc.) and optical recognition (OCR) of the text data inside them. Project challenges include research and development of image scanning, approximate image matching, image normalization (contrast, move, rotate, deskew, etc.), background removal algorithms, as well as development of specialized OCR text recognition engine with 99.9% accuracy for Latin and Cyrillic text. The ID cards scanning and OCR tool is integrated in various CRM, ERP, insurance, hotel management, document management, contract management and other systems. Participated as consultant, developer (partially) and project coordinator.

Technologies: C++, C#, image processing toolkits, proprietary image processing algorithms, OCR frameworks

# IMS – Insurance Management System (March 2009 – October 2009)

**Description:** Complex information system for creating and managing automobile insurances (TPL, Kasko and others). The system is utilized by all agents and brokers of large insurance company to create insurances, print policies, send reports and perform payments. It provides management of branches, brokers and agents, clients register, vehicle register, insurances register, tariffs calculator, blanks management, commissions management, additives management, optical passport data reader integration, policy printing as PDF, and reporting in Excel. It provides also Web interface for online insurances and Web services interfaces for integration with external systems. Participated as technical leader and principal software engineer.

**Technologies:** C#, .NET Framework, Castle Framework, MonoRail, Brail View Engine, Windsor Container, JavaScript, AJAX, jQuery, Prototype JavaScript framework, Oracle, SQL, PL/SQL, ActiveRecord, NHibernate, iText.NET, NUnit, Web services, ActiveX, Subversion, Trac

#### **TAM Tool** (February 2009 – March 2009)

**Description:** Telecom Applications Map Tool keeps information about the applications running in a large telecom according to the TeleManagement Forum Applications Framework (TAM). The tool simplifies planning and monitoring the existing IT ecosystem by keeping structured information about groups, categories, functions, applications, vendors and contacts. Participated as project leader.

Technologies: Java, Spring Framework, Hibernate, MySQL, Google Web Toolkit (GWT), GWT-Ext, Tomcat

#### **Astral Web Mapping** (December 2008 – March 2009)

**Description:** Web portal for visually navigating through a set of advertisement sites on a map. The portal provides browsing indoor and outdoor advertisement sites by location, sale market and media product and displaying them on a map along with photos and videos about each of them. For registered customers the portal provides tracking of their marketing campaigns and seeing proof of performance reports. Participated as technical architect and team leader.

**Technologies:** C#, .NET Framework, ASP.NET, JavaScript, Microsoft Live Maps integration, MS SQL Server, Web services, Windows Communication Foundation (WCF), MS Project

#### Composer Mail (December 2008 – February 2009)

**Description:** Online Web based email marketing tool for management of marketing campaigns and distributing newsletters (<a href="www.composermail.com">www.composermail.com</a>). It provides campaign management, contacts management, composition of stories and newsletters, distribution of newsletters and reporting. Participated as high-level technical manager.

Technologies: C#, ASP.NET, MySQL

# B. O. Dental (October 2008 – February 2009)

**Description:** Information system for dentists managing the patients, their visits and medical treatment. Provides various reports required by the National Health Insurance Fond and the government.

Technologies: Java, Hibernate, JavaDB (Apache Derby), Swing, Actuate e.Spreadsheet

#### Unimasters ERP (September 2008 – December 2008)

**Description:** Complex ERP system for management of transportation logistics for Unimasters Logistics Plc. The system consists of CRM module (contacts, contracting parties, agents, etc.), road transportation module, overseas freight module, full container load (FCL) and LCL (less than container load) modules, air cargo logistics module, finances, invoices and payments module, warehouse module, reporting, etc. Participated as high level development manager.

**Technologies:** Java, Hibernate, Oracle, JavaServer Faces (JSF), myFaces, Ajax4jsf, RichFaces, Spring Framework, JUnit, Maven, Tomcat, Jetty, MS Project

#### Introduction to Programming with Java Book (August 2008 – January 2009)

**Description:** Managed a team of 20 authors and 10 editors in writing an open-source computer programming book for beginners. In its 962 pages the book covers the fundamentals of computer programming, data structures and algorithms with examples in Java. Written in Bulgarian language. Official web site: <a href="http://www.introprogramming.info/intro-java-book/">http://www.introprogramming.info/intro-java-book/</a>.

Technologies: Java, data structures, algorithms

# ASP.NET, Windows Forms, WPF and Silverlight Software Engineering – Recruitment and Training for Telerik (May 2008 – December 2008)

**Description:** Organized a project for recruitment, specialized training and building a team of 16 skillful Microsoft .NET software engineers for large international software development corporation <u>Telerik</u>. Organized the entire recruitment process, training programs, preparation of training materials and teaching of training courses in "Introduction to Programming with C#" and "Core .NET Development", "Advanced ASP.NET Web Development", "Advanced Windows Forms Development", "Advanced Windows Presentation Foundation (WPF) Development" and "Advanced Silverlight Development", as well as exams, interviews and practical projects.

Technologies: C#, .NET Framework, LINQ, SQL Server, ASP.NET, Windows Forms, WFP, Silverlight

#### Web Forms Digital Signing Framework (July 2008 – September 2008)

**Description:** Framework for digitally signing Web forms. On the client side based on signed Java applet that collects form fields data, creates XML document and signs it with digital certificate (in PKCS#12 format). The result is PKCS#7 SignedData object that is verified at the server side by Java and ASP.NET Web applications. Implemented certificate verification with CRL support. Participated as principal technologist and team leader.

**Technologies:** Java, applets, PKI, PKCS#7, PKCS#12, Bouncy Castle Crypto API, Java Web applications, Apache Derby, ASP.NET Web applications, MS SQL Server 2005, Selenium RC, JUnit, MS Project

#### IT Boxing: Java EE and SOA vs. WCF and WWF (June 2008)

Description: Organized a large technical event "IT Boxing" for disputing on "Platforms for Enterprise

Development, Web Services and SOA" attended by 200 people. Organized the entire event (prepared technical content, recruited speakers, posted PR materials, invited people, etc.).

#### TTrust Invest - Investment Control System (April 2008 - September 2008)

**Description:** Web based software for investment control for large investment organization. Tracks expenses for all work performed in large constructions and other investment sites according to well defined project plan with budget estimations. Imports project plans from MS Project, tracks their execution based on financial documents, contracts, agreements and annexes and provides comprehensive reporting. Participated as high-level project leader.

**Technologies:** Java, Java Web applications, JavaServer Faces (JSF) / myFaces, Tomcat, Hibernate, Spring Framework, PostgreSQL, Jasper Reports, Apache Maven, MS Project

# IT Boxing: ASP.NET vs. PHP vs. Java and JSF vs. Ruby on Rails (March 2008)

**Description:** Organized a large technical event "IT Boxing" for disputing on "Web Development Technologies – ASP.NET, PHP, Java, JSF, Ruby, etc." attended by 350 people. Organized the entire event (prepared technical content, recruited speakers, posted PR materials, invited people, etc.).

# C++ Software Engineering - Recruitment and Training for EGT (January 2008 - May 2008)

**Description:** Organized a project for recruitment, specialized training and building a team of 12 skillful C++ software engineers for game development company <u>Euro Games Technology (EGT)</u>. Organized the entire recruitment process, training programs, training materials and teaching of training courses in "Introduction to Programming with C++" and "Core C++ Development", as well as exams, interviews and practical projects.

Technologies: C++, STL, Boost, Eclipse CDT, Cygwin

#### Evenues.com (December 2007 – July 2008)

**Description:** Web portal (<a href="www.evenues.com">www.evenues.com</a>) for space renting services designed to connect prospective space renters with space providers. The system provides front end for space renters, for space providers and for site administrators, integrates Google maps and Authorize.net payment gateway for credit cards processing. Participated as technical architect and team leader.

**Technologies:** .NET Framework 3.5, ASP.NET, ASP.NET AJAX, XHTML, JavaScript, CSS, IIS 6.0, LINQ, LINQ-to-SQL, Visual Studio 2008, SQL Server 2005, T-SQL, Google maps integration, Authorize.net payments, PayPal integration, Selenium RC, NUnit, Log4Net, CruiseControl.NET, technical specification, technical architecture and design, database design, project management, MS Project

#### IT Boxing: Java, JPA and Hibernate vs. ADO.NET and LINQ (December 2007)

**Description:** Organized a large technical event "IT Boxing" for disputing on "ADO.NET Entity Framework and LINQ vs. Java Persistence API and Hibernate" attended by 250 people. Organized the entire event (prepared technical content, recruited speakers, posted PR materials, invited people, etc.).

## Content Distribution and Management Platform (July 2007 – March 2009)

**Description:** Complex e-commerce and mobile commerce system for large telecom operator (under NDA). It manages a large repository of content items (audio, video, games and pictures) with flexible Web 2.0 based administrative interface. Implements custom billing system and provides Web and mobile portal to the end users. Special users called "content providers" upload and organize new content while the end users purchase them from their mobile phone or from the Web. Participated as technical architect and team leader.

**Technologies:** Java, Google Web Toolkit, Oracle, SQL, PL/SQL, Hibernate, UI prototypes, technical architecture and design, database design, project management

# Embedded C Development and Real Time Operating Systems – Recruitment and Training for JCI (September 2007 – December 2007)

**Description:** Organized a project for recruitment, specialized training and building a team of 25 skillful embedded C engineers for large embedded development company <u>Johnson Controls (JCI)</u>, leader in the automotive industry. Organized the entire recruitment process, training programs, training materials and teaching of training courses in "Introduction to Programming with C", "Advanced C Programming" and "Embedded C and Real-Time Operating Systems", as well as exams, interviews and practical projects.

Technologies: C, Eclipse CDT, Cygwin, embedded C, real-time operating systems

#### **GWT Advanced Table** (August 2007 – November 2007)

**Description:** Open-source reusable table component (widget) for Google Web Toolkit (GWT). It supports paging, sorting, filtering and multiple selection: <a href="http://code.google.com/p/gwt-advanced-table/">http://code.google.com/p/gwt-advanced-table/</a>. Project leader and principal developer of the project.

Technologies: Java, Google Web Toolkit (GWT), DOM, HTML, CSS

# Java and Oracle Software Engineering – Recruitment and Training for Fadata (July 2007 – December 2007)

**Description:** Organized a project for recruitment, specialized training and building a team of 16 skillful Java & Oracle software engineers for local software development company <u>Fadata</u>. Organized the entire recruitment process, training programs, training materials and teaching of training courses in "Introduction to Programming with Java" and "Core Java and Oracle Development", as well as exams, interviews and practical projects.

Technologies: Java, Java EE, JDeveloper, Hibernate, ADF, Servlets, JSP, Tomcat, OC4J, Oracle, SQL

#### iShoof Local Search Engine (March 2007 – August 2007)

**Description:** iShoof (<a href="www.ishoof.com">www.ishoof.com</a>) is a local search engine with large database of millions of business entities, Web based front end with rich AJAX user interface. It consists of searcher module, administration modules, statistics module, mobile search module, GIS module, payment gateway, SMS notification module, and others. Participated as technical architect and team leader.

**Technologies:** Java, Oracle, PL/SQL, Hibernate, DHTML, JavaScript, AJAX, JavaServer Faces (JSF), Spring Framework, UML, requirements specification, UI prototypes, technical architecture and design, database design, project management

#### First Bulgarian C++ Conference (May 2007 – June 2007)

**Description:** Organized a large technical event for C++ developers in Velingrad called "First Bulgarian C++ Conference" – <a href="http://conf2008.cppbg.devbg.org/">http://conf2008.cppbg.devbg.org/</a>. Recruited speakers, created the technical program, reviewed the lectures, and assisted in the entire organization.

Technologies: C++, C++0x, STL, Boost, game programming

# HairStylist CRM System (March 2007 – July 2007)

**Description:** CRM system for large chain of hairdressing studios (under NDA). It manages employees, inventory, customers, services, payments, etc. Participated as technical architect and team leader.

**Technologies:** .NET Framework, C#, Windows Forms, NHibernate, SQL Server, database reports (ReportViewer), technical specification, UI prototyping, technical architecture and design, database design, project management

### HypoXL.BackOffice - Loan Application Management System (March 2007 - May 2007)

**Description:** A Web based CRM system that manages all the stages of a loan application and approval process in a financial institution in the Netherlands. It implements data entry, specific workflow, search and reporting. Participated as team leader.

Technologies: C#, ASP.NET, ASP.NET AJAX, AJAX Controls Toolkit, NHibernate, MS SQL Server

#### Lock3r - Password Management System (April 2007 – May 2007)

**Description:** AJAX based Web application for secure storage and management of sensitive information like passwords with client-side encryption. Participated as team leader.

**Technologies:** C#, ASP.NET, ASP.NET AJAX, AJAX Controls Toolkit, JavaScript, DHTML, NHibernate, MS SQL Server

# C++ Software Engineering – Recruitment and Training for EGT (February 2007 – June 2007)

**Description:** Organized a project for recruitment, specialized training and building a team of 14 skillful C++ software engineers for game development company <u>Euro Games Technology (EGT)</u>. Organized the entire recruitment process, training programs, training materials and teaching of training courses in "Introduction to Programming with C++" and "Core C++ Development", as well as exams, interviews and practical projects.

Technologies: C++, STL, Boost, Eclipse CDT, Cygwin

#### Plexus MES - Manufacturing Execution System (January 2007 - March 2007)

**Description:** Complex manufacturing execution system (MES) for the electronics manufacturing activities of Plexus Corporation (<a href="www.plexus.com">www.plexus.com</a>). Controls, tracks and measures critical production activities, provides increased traceability, productivity, and quality. I handled the "Unit Genealogy" module responsible for parts association, disassociation and tracking. Technical architect and team leader for the Bulgarian team. Onsite work in Plexus Corp., Neenah, WI, USA.

**Technologies:** .NET Framework, VB.NET, DotNetNuke, ASP.NET, AJAX, ADO.NET, SQL Server, T-SQL, MS Visio, UML, technical specification, UI prototyping, technical architecture and design with UML (use case, sequence, class, component and deployment diagrams), database design, project management

#### Java Development Practical Training Course (July 2006 – September 2006)

**Description:** Coaching a 3 months full-time comprehensive practical course in Software Engineering with Java, Oracle, JDBC, Hibernate, Swing, Servlets, JSP, custom tags, JSTL, Tomcat, etc. at the <u>National Academy for Software Development (NASD)</u>.

Technologies: Java, Oracle, Hibernate, Swing, Tomcat, Servlets/JSP, custom tags, JSTL

# Java Software Engineering - Recruitment and Training for Acsior (June 2006 - November 2006)

**Description:** Organized a project for recruitment, specialized training and building a team of 13 skillful Java software engineers for local software development company <u>Acsior</u>. Organized the entire recruitment process, training programs, training materials and teaching of training courses in "Introduction to Programming with Java" and "Core Java Development", as well as exams, interviews and practical projects.

Technologies: Java, Java EE, Eclipse, Hibernate, Servlets, JSP, Tomcat, Oracle, SQL

## Java Development Practical Training Course Curriculum (February 2006 – July 2006)

**Description:** Development of training curriculum and teaching materials for a comprehensive practical course in Software Engineering with Java, Oracle, JDBC, Hibernate, Swing, Servlets, JSP, custom tags, JSTL, Tomcat, etc. at the <a href="National Academy for Software Development (NASD)">National Academy for Software Development (NASD)</a>. It consists of about 2500 PowerPoint slides, 500 examples and demonstrations and 300 exercises. Participated as project leader and principal writer.

**Technologies:** Java, Oracle, Hibernate, Swing, Tomcat, Servlets/JSP, custom tags, JSTL, MS Word, MS PowerPoint

# .NET Enterprise Development Practical Training Course (November 2005 – February 2006)

**Description:** Coaching a full-time comprehensive practical course in Software Engineering with .NET Framework, C#, MS SQL Server, ADO.NET, Windows Forms, ASP.NET, Web Services, etc. at the <u>National Academy for Software Development (NASD)</u>. Participated as principal trainer.

**Technologies:** Microsoft .NET Framework, C#, Windows Forms, ASP.NET, ADO.NET, SQL Server, XML.NET, XML Web-services, Remoting

## .NET Framework Programming Textbook (April 2005 – November 2005)

**Description:** Project leader, writer and reviewer for a comprehensive programming textbook "Programming for .NET Framework" (Volume 1 – 801 pages, ISBN 954-775-505-6 and Volume 2 – 1035 pages, ISBN 954-775-672-9) – <a href="http://www.devbg.org/dotnetbook/">http://www.devbg.org/dotnetbook/</a>

**Technologies:** Microsoft .NET Framework, C#, Windows Forms, ASP.NET, SQL Server, ADO.NET, XML.NET, XML Web-services, MS Word, MS PowerPoint, and many others

# Java for Digitally Signing Documents on the Web Textbook (August 2005 – September 2005)

**Description:** Writing a textbook about digital signatures, PKI, digital certificates, Java cryptography, public/private key cryptography, keystores and smart cards (144 pages, ISBN 954-775-504-8) – http://www.nakov.com/books/signatures/.

**Technologies:** Java, PKI, digital signatures, digital certificates, PKCS#12, PKCS#11, Java cryptography, Java applets, Tomcat, Servlets, JSP, Struts framework, MS Word

# .NET Framework Programming Course and Teaching Materials (Mart 2004 – June 2005)

**Description:** Development of a set of teaching materials for teaching a course on Microsoft .NET Framework with the C# language for the Bulgarian universities. Consists of presentations, lectures and exercises (about 1800 PowerPoint slides, 800 examples and 300 exercises). Project developed in Sofia University, sponsored by Microsoft Research. Participated as project leader, principal writer and reviewer.

**Technologies:** Microsoft .NET Framework, C#, Windows Forms, ASP.NET, ADO.NET, XML.NET, XML Webservices, Microsoft Word, Microsoft PowerPoint

#### Internet Programming with Java – Course and Textbook (October 2003 – February 2004)

**Description:** Development of a set of teaching materials and a textbook for teaching a course on Internet and Web development for the Java platform. The book "Internet programming with Java" (ISBN 954-775-305-3) is 233 pages and covers the Java I/O, multithreading, sockets and Web programming with Servlets, JSP and Tomcat – <a href="http://www.nakov.com/books/inetjava/">http://www.nakov.com/books/inetjava/</a>. Principal writer for the book and project leader for the course.

Technologies: Java I/O, multithreading, sockets, Servlets, JSP, Tomcat, MS Word

# NakovDocumentSigner (July 2003 - September 2003)

**Description:** Principal developer of an open-source framework that provides digital signature functionality in Java-based Web applications based on Public Key Infrastructure (PKI). It consists of a signed Java applet for digital signing of files at the client-side and Web application for verification of digital signatures, certificates and certificate chains at the server-side. It supports PKCS#12 keystores and PKCS#11 smart cards. Project is available at <a href="http://www.nakov.com/documents-signing/">http://www.nakov.com/documents-signing/</a>.

**Technologies:** Java, Java Applets, JSP/Servlets, Apache Tomcat, Struts Web Application Framework, Apache Ant, Digital Signatures, X.509 Certificates, Java Cryptography Architecture, Java Certification Path API, PKCS#12, PKCS#11, Smart Cards

# Registry of the Documentation of the National Securities Commission (October 2002 - June 2003)

**Description:** Document management information system for handling the documentation of the <u>Bulgarian National Securities Commission</u> at the Bulgarian Government with Web-based interface and Swing administrative interface. It stores and handles documents that have dynamically defined and modifiable structure in order to meet the Securities Commission constantly changing needs. It supports also multiple versions, multiple structures (templates) and multiple languages for the documents. Participated as senior developer.

**Technologies:** Java, ATW/Swing, JSP/Servlets, Oracle 9i Database, Business Components for Java (BC4J), Oracle Container for J2EE (OC4J), PKI, digital signatures, digital certificates (X.509), Java cryptography

#### Nakov Mail Center (February 2002 - October 2002)

**Description:** High-performance delivery platform for email marketing used by <u>PM Marketing</u>, <u>USA</u>. It consists of spider for collecting email addresses, scanner for public proxy servers, anonymous mail dispatcher working as mail transport agent (MTA), coordination and repository server and a set of management tools. It was deployed as distributed system on multiple servers on several locations. Project leader and principal developer.

**Technologies:** Delphi, MIDAS (3-tier architecture for Delphi distributed applications), COM, DCOM, VCL, InterBase SQL, XML, Win32 sockets (WinSock), asynchronous non-blocking sockets, multithreading and synchronization

#### CashPot Poker (October 2001 - January 2002)

**Description:** Online casino for playing poker in Internet in real time with rich Web interface based on macromedia Flash. Consists of complex server for handling the poker games, rules engine (Texas Holdem and other games), payments module, monitoring and administration module. Participated as senior Java developer.

**Technologies:** 3-tier architecture, Java, Oracle 9i Database, Oracle Real Application Cluster, SQL, PL/SQL, JDBC, JSP, Servlets, Tomcat, HTML, CSS, JavaScript, Macromedia Flash, AWT/Swing UI

# Instill Security and Directory Services Admin (August 2001 - October 2001)

**Description:** Web-based system for administration of complex corporate asset repository of <u>Instill Corporation</u>. Participated as senior Java developer.

**Technologies:** 3-tier architecture, Java, BEA WebLogic Server, EJB, Oracle Database, SQL, PL/SQL, JDBC, JSP, Servlets, XML, XSL Transformations (XSLT), HTML, JavaScript

#### Musala Issue Tracking System (July 2001 - August 2001)

**Description:** Web-based issue tracking tool for managing projects, issues, tasks and defects. It provides multiuser access to a shared repository for issues. Participated as senior Java developer.

Technologies: Java, JSP, Servlets, Tomcat, Struts framework, InterBase, SQL, JDBC, HTML, CSS, JavaScript

#### Instill Order Guide Manager Admin (March 2001 - June 2001)

**Description:** Web-based system for internal administration of complex corporate information system in <u>Instill</u> Corporation. Participated as Java developer.

**Technologies:** 3-tier architecture, Java, BEA WebLogic Server, EJB, Oracle database, SQL, PL/SQL, JDBC, JSP, Servlets, HTML, JavaScript

#### **LeaseLoan e-Leasing System** (September 2000 - March 2001)

**Description:** CRM system for managing credit applications. It provides online access to leasing and financing programs through third-party lenders. Customers apply for loans online; the system checks their credit reports, estimates the risk and suggests further actions. Participated as Java developer.

**Technologies:** 3-tier architecture, Java, Oracle database, SQL, PL/SQL, JDBC, Cold Fusion, Multithreading, Sockets, RMI, SSL/HTTPS, XML, PDF document generation

#### Purchase Web Mobile (May 2000 - September 2000)

Description: Purchase and ordering system for Palm handheld devices. Participated as Java developer.

**Technologies:** 3-tier architecture, Java, JDBC, SQL, C++, Multithreading, Sockets (Winsock, Java Sockets), XML, Palm OS programming (in C++)

## Register of Public Auctions (October 1999 - April 2000)

**Description:** Information system for the public auctions for the Bulgarian government with Web-based access for the Council of Ministers of the Bulgarian Government – <a href="http://www1.government.bg/rop/">http://www1.government.bg/rop/</a>. Participated as Oracle Forms developer.

**Technologies:** 3-tier architecture, Oracle database, Oracle Developer 2000, SQL, PL/SQL, PHP, HTML, JavaScript

#### Yin Yang (September 1999 - March 2000)

Description: Multimedia e-learning system for self-study of Danish language. It consists of content creation

system and content viewer. Content is delivered as sequence of slides and exercises. The slides support text materials, images, audio, video, and a wide range of functionality for exercises. Participated as Delphi and Win32 developer.

**Technologies:** Delphi, VCL, Win32, multimedia, graphics and animation (GDI+), sound and video processing, COM, ActiveX, multithreading

**Intax** (October 1998 - March 1999)

**Description:** Billing and reporting system for digital and analog telephone centrals used in the <u>Bulgarian Telecommunication Company (BTC)</u>. It consists of repository containing information about telephone calls, gathered from telephone centrals through a modem connection. It provides various reports about the phone calls. Participated as Delphi developer.

Technologies: Client-server architecture, Delphi, VCL, Win32, self-made database

# Teaching Experience

Lecturer in "Introduction to PHP" in National Academy for Software Development, 2009

Lecturer in "Software Engineering with Java and Java EE" in Neterra, 2008-2009

Lecturer in "Programming with Oracle, SQL and PL/SQL" in SG-ExpressBank, Varna, 2008

Lecturer in "Programming for Java EE" in SAP Labs Bulgaria, 2008

Lecturer in "Core Java Development" in National Academy for Software Development, 2006-2007

Lecturer in "Core .NET Development" in National Academy for Software Development, 2006-2007

Lecturer in "Programming for .NET 2.0" in Sofia University, 250 students, 2006-2007

Lecturer in "Java Web Applications Development" in Sofia University, 140 students, 2006-2007

Lecturer in Java programming courses (NETB358, NETB368) in New Bulgarian University, 2007

Lecturer in "Design Patterns in C#" in Sofia University, 280 students, summer semester, 2006

Lecturer in ".NET Enterprise Development" in National Academy for Software Development, 2005-2006

Lecturer in "Programming for the .NET Framework" in Sofia University, 270 students, 2005

Lecturer in "High-Quality Programming Code" in Sofia University, 250 students, 2005

Lecturer in "Programming for the .NET Framework" in Sofia University, 250 students, 2004

Lecturer in "Internet Programming with Java" in Sofia University, 350 students, 2004

Lecturer in "Network Security - 2" in Sofia University, 100 students, 2004

Lecturer in "Network Security" in Sofia University, 400 students, 2003

Lecturer in "Design and Analysis of Computer Algorithms" in Sofia University, 300 students, 2003

Lecturer in "Programming for the .NET platform" in Sofia University, 300 students, 2003

Lecturer in "High-Quality Programming Code Construction" in Sofia University, 250 students, 2003

Lecturer in "Network Security" in Sofia University, 350 students, 2002

Lecturer in "Internet Programming with Java" in Sofia University, 450 students, 2002

Assistant in "Design and Analysis of Computer Algorithms" in Sofia University, 180 students, 2001

Assistant in "Mobile Technologies and .NET Compact Framework" in Sofia University, 30 students, 2004

Assistant in "Data Structures in C++" in Sofia University, 2001

Assistant in "Introduction to Programming in Java" in Sofia University, 2000

#### **Skills**

#### **Computer Science and Software Engineering Skills**

Software project management

Software architectures

Software engineering

Object-oriented programming and modeling

Distributed systems and multi-tier architectures

Relational databases and database design

Internet technologies and Web development

High-quality programming code construction

Network security, PKI and cryptography

Business analysis and business process modeling

Multithreading and synchronization

Computational linguistics and natural language processing (NLP)

Data structures and algorithms

#### **Programming Languages**

Java, C#, C, C++, SQL, Delphi, Pascal, PHP, JavaScript, Visual Basic, Lisp, Prolog, Logo

# **Software Technologies**

Java, Java EE and related technologies – JDK, JDBC, Hibernate, JavaBeans, Servlets, JSP, RMI, EJB, JNDI, AWT, Swing, Sockets, Multithreading, Applets, JNI; Tomcat, OC4J, WebLogic, JBoss; Struts; Ant, Maven, Google Web Toolkit (GWT), GWT-Ext, JavaServer Faces (JSF), myFaces, RichFaces, Spring Framework, JUnit, Log4J

Microsoft .NET Framework and related technologies – C#, Windows Forms, ASP.NET, ADO.NET, NHibernate, LINQ, LINQ-to-SQL, Web services, Remoting, Sockets, Multithreading, Regular expressions, NUnit, Log4Net, Internet Information Services (IIS), Castle, Windsor, MonoRail

Database access – Oracle, MS SQL Server, MS Access, MySQL; SQL, PL/SQL, T-SQL, ODBC, JDBC, ADO, ADO.NET, Stored procedures, Transactions, LINQ, LINQ-to-SQL; MongoDB, Redis

Web programming - ASP.NET, CGI, Servlets, JSP, Struts framework, PHP, AJAX, JSF, WordPress

Web sites and client-side scripting – HTML, DHTML, CSS, JavaScript, Prototype JavaScript Framework, jQuery

Mobile development - WAP, WML, WMLScript

Internet protocols – TCP/IP, HTTP, HTTPS, SMTP, POP3, FTP

Socket programming - Winsock, Java sockets, .NET sockets

Windows programming - Win32 API, COM, ActiveX, ODBC, ADO

XML programming - DOM, SAX, DTD, XSchema, XPath, XSL/XSLT

Automated software testing – JUnit, NUnit, Selenium RC

PKI, Digital certificates and signatures – Java Cryptography Architecture (JCA), Java Cryptography Extension (JCE), PKCS#12, PKCS#11, PKCS#7, smart cards

#### Other Skills

Leadership, Team working; Communication skills; Presentation skills; Teaching skills; Writing skills, Project management skills

# Languages

English, Russian, Bulgarian

#### **Awards**

Award "John Atanassoff" of the <u>Bulgarian President</u> for Contribution to the Development of the Information and Computer Technologies and Information Society, Bulgaria, 2004

Award "Citizen of Veliko Tarnovo of the Year" of the Veliko Tarnovo Municipality, Bulgaria, 2005

National Scholarship "John Atanassoff" for Computer Science Research, Evrika Foundation, 2003

Participation in ACM ICPC World Finals (as a trainer), Prague, Czech Republic, 2004

Bronze Medal, XI International Olympiad in Informatics (IOI99), Turkey, 1999

Bronze Medal, X International Olympiad in Informatics (IOI98), Portugal, 1998

Bronze Medal, VII Balkan Olympiad in Informatics (BOI99), Greece, 1999

Bronze Medal, IV Balkan Olympiad in Informatics (BOI96), Cyprus, 1996

National Diploma for High Achievements in Computer Science, Bulgaria, 1999

1st prize, National Student's Programming Contest, Bulgaria, 2001

1st prize, National Student's Programming Contest, Bulgaria, 2000

1st prize and admission in University without exam, National Olympiad in Informatics, Bulgaria, 1998

3<sup>rd</sup> prize and admission in University without exam, National Olympiad in Informatics, Bulgaria, 1999

Winner in over 30 other national computer programming contests, 1994-2001

#### **Books**

Nakov S. & Co., <u>Introduction to Programming with Java</u>, 962 pages, Faber Publishing, Veliko Tarnovo, 2009, ISBN 978-954-400-055-4

Nakov S. & Co., <u>Programming for .NET Framework</u> (Volume 1), 801 pages, Faber Publishing, Veliko Tarnovo, 2005, ISBN 954-775-505-6

Nakov S. & Co., <u>Programming for .NET Framework</u> (Volume 2), 1032 pages, Faber Publishing, Veliko Tarnovo, 2006, ISBN 954-775-672-9

Nakov S., <u>Internet Programming with Java</u>, 230 pages, Faber Publishing, Veliko Tarnovo, 2004, ISBN 954-775-305-3

Nakov S., <u>Java for Digitally Signing Documents on the Web</u>, 144 pages, Faber Publishing, Veliko Tarnovo, 2005, 954-775-504-8

#### **Selected Publications**

Nakov S., Nakov P., Paskaleva E. "Unsupervised Extraction of False Friends from Parallel Bi-Texts Using the Web as a Corpus", International Conference "Recent Advances in Natural Language Processing" (RANLP 2009), Borovets, Bulgaria, September 2009

Nakov S., Paskaleva E., Nakov P. "A Knowledge-Rich Approach to Measuring the Similarity between Bulgarian and Russian Words", Workshop in conjunction with RANLP 2009, Borovets, Bulgaria, September 2009

Nakov S. "Automatic Identification of False Friends in Parallel Corpora: Statistical and Semantic Approach", Serdica Journal of Computing, issue 3, April 2009

Nakov S., "Automatic Acquisition of Synonyms Using the Web as a Corpus", 3<sup>rd</sup> Annual South-East European Doctoral Student Conference, Thessaloniki, Greece, June 2008

Nakov S., "Measuring Cross-Lingual Semantic Similarity by Searching in Google", 5<sup>th</sup> International Conference "The Language: A Phenomenon without Frontiers", Varna, Bulgaria, June, 2008

Nakov P., Nakov S., Paskaleva E., "Improved Word Alignments Using the Web as a Corpus", International Conference RANLP2007, Borovets, Bulgaria, September 2007

Nakov S., Nakov P., Paskaleva E., "Cognate or False Friend? Ask the Web!", Workshop in conjunction with International Conference RANLP2007, Borovets, Bulgaria, September 2007

Nakov S., Nedyalkov N., Java Applet for Signing with a Smart Card, <u>Developer.com</u>, February 2006

Nakov S., Java Servlets, Web-applications and Tomcat Server, WebDevMagazine, October 2004

Nakov S., Digital Documents Signing in Java-based Web Applications (series of 5 articles), Developer.com, 2003-2004

Nakov S., Internet Programming with Java (series of 8 articles), PC Magazine/Bulgaria, 2002-2003

Nakov S., Web Programming with Java Server Pages, PC Magazine/Bulgaria, August 2000

Nakov S., Java Servlets – Introduction to Web Programming, PC Magazine/Bulgaria, May 2000

Atanassova I., Nakov S., Nakov P., FineArtsDict – Software for Creating and Maintaining Billingual Computer Explanatory Dictionaries, Proceedings of the 9<sup>th</sup> International Scientific Symposium MAPRIAL 2004, Belgrade, Serbia, June 2004

Atanassova I., Nakov S., Nakov P., ArtsSemNet: From Bilingual Dictionary to Bilingual Semantic Network, Proceedings of the <u>Workshop on Balkan Language Resources and Tools</u>, 1st Balkan Conference in Informatics, Thessaloniki, Greece, November 2003

Atanassova I., Nakov P., Nakov S., Technique of Semantic for Automatic Hyponym Chains Extraction from Terminological Dictionaries, Proceedings of the 8th International Scientific Symposium MAPRIAL 2002, pp. 309-314, Veliko Tarnovo, Bulgaria, April 2002

#### **Seminar Lectures**

"Integration between PHP and .NET Applications", Speaker at technical event for Web developers organized by Microsoft, 06/2009

"New Trends in Service-Oriented Architecture (SOA) for 2008", Speaker at 6-th Annual Software Engineering Conference of <u>ICB</u>, 09/2008

"Web Services for Interoperability between Java and .NET", Speaker at IT Boxing, 06/2008

"Transactions Management in SQL Server 2008", Speaker at Microsoft DevDays 2008, 04/2008

"What is New in ASP.NET 3.5?", Speaker at Microsoft DevDays 2008, 04/2008

- "Introduction to Database Transactions Management" and "Case Study: Managing Transactions in a Supermarket Pay-desk", Speaker at joint event organized by <u>BASD</u> and BGJUG, 01/2008
- "Software Engineering Fundamentals", Seminar in Technological School Electronic Systems, 11/2007
- "Creating AJAX Applications with Google Web Toolkit (GWT)", Speaker at joint event organized by BASD and BGJUG, 09/2007
- ".NET 2.0 Applications Security", Speaker at Microsoft DevDays 2007, 05/2007
- "Agile Methodologies for Software Development", Speaker at Microsoft DevDays 2007, 05/2007
- "Agile Development and Extreme Programming", Speaker at BASD seminar, 06/2007
- "Introduction to Software Engineering", Speaker at BASD seminar, 06/2007
- "Database Design with SQL Server Management Studio", Seminars in the Universities, 12/2006
- "Software Configuration Management Fundamentals", Speaker at BASD seminar, 11/2006
- Seminar "Relational Databases and SQL Server 2005 Theory and Practice", Seminars in Sofia Universities and Technical University Sofia, 10/2006
- "Developing Web Portals with ASP.NET Web Parts", Speaker at Computer Space 2006, 11/2006
- "The Way of the Bulgarian Software Developer", Lecturer at the festival "International Media Awards for Web" Albena, 06/2006
- "High-Quality Programming Code", Lecturer at the Technical University Sofia, 04/2006
- "Regular Expressions" Lecture at the WebTech 2005 conference Nakov S., Penkov G., 04/2005
- "Software Technologies for the e-Business" Lecture in the American College of Sofia, 04/2005
- "New Features in .NET CLR 2.0", "How to teach .NET Framework" Series of lectures during the Microsoft Developer's Day in 8 Bulgarian Universities, 05/2005
- "High-Quality Programming Code", Lecturer at the University of Veliko Tarnovo, 01/2005
- "FABRIQ A Message-Oriented Architecture for High-Performance Distributed Calculations" Series of lectures during the Microsoft Developer's Day in 7 Bulgarian Universities, 12/2005
- "High-Quality Programming Code", Honorable lecture during the St. Kliment's Days in Sofia University "St. Kliment Ohridski" Nakov S., Kulov M., Ivanov G., 11/2004
- "New Features in JDK 1.5" Lecturer in a technical seminar of BASD, ISECA and LIO, 07/2004
- "Implementing Application Security Using the Microsoft .NET Framework", Lecturer on the National Conference "Information Technologies in the Education", 04/2004
- "Digital Document Signing in Web Java-based Open-source Framework", Lecturer during the WebDev Conference (WebTech'2004), 03/2004
- "Borland Janeva: .NET Interoperability with J2EE and CORBA", Lecturer during the Microsoft and Borland Developer's Day, 02/2004
- "The secrets of .NET Windows Forms and DataGrid" Lecturer during the Microsoft and Borland Developer's Day, 02/2004
- "Microsoft .NET Framework Overview" Series of lectures during the Microsoft Developer's Day in 7 Bulgarian Universities, 12/2003 03/2004
- "Network Security and Network Attacks" Honorable lecture during the St. Kliment's Days in <u>Sofia University "St. Kliment Ohridski"</u> Bachvarov A., Kolev V., Chorbadzhiyski G., Nakov S., Nedyalkov N., Pentchev P., 11/2003, Sofia, Bulgaria
- "The J2EE Platform" Lecturer at <u>Bulgarian Oracle User Group</u> seminar, 06/2003
- "Network Security and Hackers' Attacks" Lecturer at the Spring International Seminar on "Computer Networks" organized by <u>Board of European Students of Technology</u>, 04/2003
- "Best Practices in J2EE Programming Models", Bulgarian Oracle User Group seminar, 09/2002
- "Internet and the Teaching by Informatics in the School" Speaker at the fourth annual meeting of the I\*EARN coordinators in Central/Eastern Europe and Central Asia, 03/1999