VLADIMIR ALEXIEV

Date of birth: 30 April 1968

Passport holder: Bulgarian, Canadian

Education:

Institution [Date from - Date to]	Degrees, Diplomas, Certificates obtained:
IBM Corporation, 7/2007	IBM Lotus Forms Certified Application Developer certification
Project Management Institute, 8/2003	Project Management Professional certification
Algonquin College, Ottawa, Ontario, 1-4/2003	Project Risk and Quality Management diploma
University of Alberta, Edmonton, 9/92-11/99	PhD in Computer Science degree
Technical University of Sofia, Bulgaria, 9/86-6/91	MS in Computer Science degree

Language skills: Competence on a scale of 1 to 5 (1=excellent; 5 =basic)

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Language	Reading	Speaking	Writing	Evidence
Bulgarian	1	1	1	Mother tongue
English	1	1	1	Worked 12y in Canada
Russian	1	1	1	Studied 1-7 th grade in Russian language school

International experience

Country	Date from - Date to			
Bulgaria	1984-1991, 2003-present (7+13 years)			
Belgium	2007, 2009 (2 months)			
Canada	1992-2002 (11 years)			
Romania	2007 (3 months)			

Membership in professional bodies:

- Project Management Professional; Project Management Institute
- EU research proposal evaluator (H2020, FP7)
- Europeana Members Council councillor

Present position:

• Lead, Data and Ontology Management, Ontotext Corp

Years with the firm:

• Ontotext: 6 years, Sirma Group Holding (parent company): 24 years

Key qualifications

- MS and PhD degree in Computer Science, Project Management Professional certification, 25 years of IT experience, 14 years of PM experience
- Semantic Web, RDF, RDFS, OWL2, SPARQL, SPIN, SHACL, ShEx, ETL, ontology engineering, RDF Shapes, application profiles, data mapping, semantic data integration, semantic applications
- Tender document drafting, ICT program/project evaluation, project budget/duration estimation, EU PRAG rules, PMBOK and TEMPO methodologies, IT PM university lecturer
- Enterprise Architecture, design of complex IT solutions, CASE tools, BPM/BPMS/BPMN/BPEL
- Data: analysis, modelling, design, conversion, migration; object-oriented analysis, UML (use case diagrams and use case realisations), RUP
- Practical experience in design, cost estimation, development, implementation and maintenance of large and complex IT systems in the public and private sector
- Web-based development; project management, configuration management; requirements and business analysis;

Other Skills

- **Semantic technologies**: Ontology engineering, RDF, RDFS, OWL2, SKOS, SPARQL, SPIN, SHACL, ShEx, Linked Open Data, mapping, ETL, RDF Shapes, application profiles, data mapping, semantic data integration, semantic applications.
- Cultural Heritage: digitization, Europeana, Bulgariana (BG aggregator to Europeana), ResearchSpace. Ontologies
 and metadata standards: DC, CIDOC CRM, EDM, LIDO, VRA, CDWA, FRBR, FRBRoo, FRAD. Thesauri (VIAF,
 GeoNames, TGN, ULAN, AAT), thesaurus mapping.
- Architecture: Service Oriented Architecture, Enterprise Architecture, Archimate, Zachman Framework
- Business Process Modeling, BPMS (Websphere Process Server, jBPM, Intalio), BPMN, BPEL
- **Requirements:** business analysis, modeling, OO analysis (UML, Rational Rose, Software Architect), specification, use cases, requirements management (RequisitePro, DOORS), requirements-based project and test planning
- **Project management:** 12 years hands-on experience, largest project managed was 380 person/months, Project Management Body of Knowledge (PMBOK), PMP certification, using Projectvisiion, expert in Microsoft Project including Server/automation/integration, Function Points analysis, COCOMO, Delphi estimation

- **Software process:** full Software Development Life Cycle (SDLC), Software Engineering Body of Knowledge (SWEBOK), Capability Maturity Model (CMM), management of process application and improvement, configuration management, release planning, source control with (VSS, CVS, SVN, ClearCase), Rational Unified Process (RUP), Rational Rose Enterprise Suite, Extreme Programming (XP)
- Quality assurance: ISO9001:2000 company certification, bugtracking tools (Bugzilla, Jira, etc), evaluate automated test tools (Rational Visual Test, Web Analysis Stress Tool, WebLoad, Pure Coverage), test-driven development, FIT framework
- **Web technologies:** Java: J2EE, Blue-prints, servlets, JSP, JDBC, EJB. XML: XML, XSLT, XSL-FO (DocBook to PDF), XML Schema. Web Services: SOAP, UDDI, WSDL, WSFL, WSCI, Web application security methods
- Languages: Proficient with Java, Perl, VBScript, JavaScript, Lisp. Experience with C#, Prolog, C++, Actor, Python, Smalltalk.
- **Data and databases:** Proficient with data analysis, modeling, schema development; Oracle RDBMS, PL/SQL, Microsoft SQL Server, TSQL, Informix IDS, Computer Associates Erwin, Oracle Designer 2000. Strong experience with data conversion, migration, ETL. Object/relational/XML mapping with Hibernate, JIBX, Dozer, generation.
- Security: Role-Based Access Control models, CAS server

Professional Experience

	onal Experience	I 1 D /	
	Ontotext Corp:	Lead, Data	Ontotext (<u>www.ontotext.com</u>) is a world-class software
			developer of core Semantic Web technologies. It has 15 years
	CEO	Management	of experience in semantic web applications, semantic
			repositories, text analysis, semantic annotation, web mining,
			etc. Roles:
			Lead, Data and Ontology Management group
			Vertical focus on semantic technologies for Cultural
			Heritage and Digital Humanities, i.e. the Galleries,
			Libraries, Archives and Museums (GLAM) sector
			Improve company processes, internal communication,
			wiki and task tracker, website structure and content.
5 /2 0 0 0	N. D. 1	TE D) (Business development, tender and proposal writing
	New Bulgarian University &	IT PM	Teach courses in Masters level university program on IT
	Bulgarian Academy of Sciences;		Project Management, co-organized by New Bulgarian
	Petya Assenova,	lecturer	University & Bulgarian Academy of Sciences (Institute of
	pasenova@nbu.bg, Program		Mathematics and Informatics).
	Director and Department of Informatics head		• Core IT PM (MITM101 and MITM102)
	informatics nead		• Software estimation (MITM308)
			Resources: <u>program</u> (2014), <u>conference paper</u> (2010),
1/2016	F	Members	presentation (2012), student evaluation (2013)
	Europeana.	Council	As a councilor I help Europeana set its strategy for future
now	Antoine.Isaac@europeana.eu, scientific coordinator	councillor	development, organize the annual meeting, and I'm active in the Europeana Data Quality committee
	scientific coordinator	Councilloi	line Europeana Data Quanty committee
9/2003-	Sirma Solutions Corp:	Chief	Overall responsibility for the R&D activities of the largest
11/2010:	Tsvetan.Alexiev@sirma.bg,	Technology	company in Sirma Group. Duties included IT consulting,
	CEO	Officer	leading project managers, tracking projects, setting
			technological and project management standards, staff
			education and career development, R&D infrastructure
			projects. Developing and leading seminars and training
			courses in project management and software development,
			both internal and external.
	WorkLogic Corp;	Director of	Overseen all product and custom project development of a
	Yavor.Djonev@sirma.bg,		web-based software development company. Successfully grew
	managing director	Development	the R&D team from 4 to 15 staff in 2 years. Duties: business
			analysis, architecture, specification, database design, project
			management, configuration management, release planning,
			setting directions for future development, oversee customer
			support and quality assurance. Wrote about 20 bids in response
1002	g: G	G C 1	to RFP requirements.
	Sirma Group;	Co-founder	Co-founded the largest Bulgarian software group. After 24
present	Yavor.Djonev@sirma.bg, CEO		years of sustained growth and spinning off over 10 companies
			(including Ontotext), Sirma Group had a successful IPO in Sep
			<u>2105</u> .

	3	(part-time)	Microcontroller applications: Intel 8051 simulator and debugger, training modules and interfacing with Stenokey specialized stenography keyboard. IGES import/export modules for the CAD system of the CAD/CAM Lab
1984-	Programa R&D Lab (Bulgarian	Developer	Business applications for the ICL DRX-20 mini-computer
1986	Academy of Sciences)	(part-time)	

Project Experience

	oject Experience			
	Company & Reference Person	Position	Description	
4-5/2016	Lars.PEDERSEN@ec.europa.eu: EC Research Axecutive Agency	Proposal evaluator	 Proposal evaluator for H2020 Research and Innovation Actions in call ICT-06-2016 Cloud Computing, covering the following topics: Deployment and management of densely interconnected and decentralised cloud infrastructures, including the extension of the fog computing paradigm to the extreme edge of the network; Cloud networking in the context of software-defined data centres as well as re-allocation of resources and services (independently of their location) across distributed computing and geographically separated data storage infrastructures; Techniques to deal with trust, security and privacy in decentralised cloud infrastructures and across multiple cloud providers, including aspects of data integrity, data localisation and data confidentiality; Evolution of cloud architectures to improve the management of physical resources and the efficiency of cloud systems, including the concomitant evolution of databases and cloud computing architectures, to address new challenges on scale, resilience and security posed by data-intensive applications deployed over highly distributed and federated environments. 	
4/2016- present	J. Paul Getty Museum. Brenda Podemski, <u>bpodemski@getty.edu</u>	CIDOC CRM expert	Mapping the J. Paul Getty Museum data to CIDOC CRM; standardization of various "micro-thesauri" (e.g. Agent Role) by mapping and adding to AAT, developing semantic search	
1/2016- present	Antoine.Isaac@europeana.eu,, Europeana scientific coordinator	Members Council and DQC	The Europeana Members Council helps Europeana setting strategy for its future work. The Data Quality Committee is a standing Working Group that researches approaches and makes recommendations aiming to improve the quality of data in Europeana, which is an important strategic goal for the next several years.	
6/2015- present	C.Kristel@niod.knaw.nl, project coordinator. Rene.van.Horik@dans.knaw.nl, WP10 & WP13 lead. Tobias.Blanke@kcl.ac.uk, WP14 lead.	Ontotext PM, XML conversion, semantic data integration, Authority development, mapping networks of people	 The European Holocaust Research Infrastructure (EHRI) aims to develop a Virtual Research Environment for Holocaust studies, integrating databases and archival guides of the important institutions working in this domain. Ontotext was invited in EHRI2 for its expertise with semantic technologies: text enrichment, semantic data integration, thesaurus management, ontology design. Ontotext is involved in these work packages: WP4: training, learning materials WP10: tool to convert partner institution data to EAD (Encoded Archival Description), EAC-CPF (Encoded Archival Context: Corporations, Persons, Families), SKOS (Simple Knowledge Organization System); interlinking to the EHRI thesaurus WP11: establish a Thesaurus Management System to maintain the EHRI thesaurus. Large-scale data integration of partner databases and thesauri, thesaurus coreferencing, ontology engineering, semantic publication of EHRI LOD. WP13: semantic text analysis and interlinking, repository of Research Objects WP14: digital historiography, semantic text analysis to extract entities and events, prosopography Partners include key Holocaust archives such as Yad Vashem, USHMM, Memorial de la Shoah, NL NIOD; and important cultural heritage and digital humanities institutions such as NL DANS (Data Archiving and Networked Services), KCL, INRIA. Three DARIAH directors are involved in the project. 	

From-To	Company & Reference Person	Position	Description
6/2015-	Steven Stegers, deputy director	Task force	The Europeana for Education task force has the mission to identify ways in which the policy recommendations
11/2015	EUROCLIO, steven@euroclio.eu.	member	on "Europeana for Education" can be put into practice. It should develop a shared vision on what an enabling
	Milena Popova,		environment is in which digital heritage is used for educational purposes, and detail what the benefits are for
	milena.popova@europeana.eu		each type of stakeholders. Semantic technologies have the power to identify and classify Europeana materials in
			specific domains, and thus have a strong role to play for realizing this vision.
			These recommendations for the use of digital cultural heritage in education and learning were developed by
			experts from European Ministries of Culture and Education from 21 different countries and external experts in
			2014/2015, facilitated by the Europeana Foundation, European Schoolnet (EUN) and European Association of
			History Educators (EUROCLIO).
			Ontotext was invited to the Europeana for Education task force because of its experience with applying semantic
			technologies to Europeana metadata. Ontotext had many fruitful discussions with EUROCLIO within the
			Europeana Creative project. Now Ontotext is working on semantic enrichment and classification of Food and
			Drink content within the EFD project, based on Wikipedia articles and categorization. We hope that the same
			general approach can be applied to educational content.
12/2013-	Wikidata	Contributor	Wikidata aims to provide a central database of facts to be used in all national Wikipedias. Wikidata has become
present			a hotbed of activity related to cultural heritage and large-scale authority database coreferencing. I established
			WikiProject Authority control for some coordination in this area, and I contribute actively, especially on Getty
			and British Museum thesauri. Active user of Mix-n-Match for thesaurus matching. See presentations GLAMs
			Working with Wikidata and Wikidata, a Target for Europeana's Semantic Strategy (the most viewed
10/0010		0 . 1	presentation at Glam-Wiki 2015), and twitter #coreferencing.
II	Dimitris Kontokostas,	Ontology	DBpedia is the center of the Linked Open Data cloud and holds huge importance for the LOD movement and as
present	kontokostas@informatik.uni-	committee co-	a source of stable URLs to link to. DBpedia also provides large amounts of domain-specific data, from
	leipzig.de: DBpedia CTO	lead	automobile engines to paintings and museums.
			The DBpedia ontology has moderate complexity (some 685 classes and 2800 properties). The DBpedia ontology
			and template mappings are developed collaboratively at http://mappings.dbpedia.org , using a Wiki. However,
			they have a number of quality problems, mainly due to insufficient editorial process and curation. As a result, currently even RDFS reasoning is not useful for DBpedia. These quality problems are outlined in various
			research papers, and were a central topic of discussion at the DBpedia Dublin meeting (Feb 2015). A committee
			was formed to make guidelines and best practices for improving the ontology and mappings, in order to
			facilitate quality improvement for DBpedia's future half-yearly release process.
			See DBpedia 2015-04 release notes credits: "Vladimir Alexiev (Ontotext) for leading a successful mapping and
			ontology clean up effort."

From-To	Company & Reference Person	Position	Description
1-4/2015	Juliane Stiller, Humboldt- Universität zu Berlin, juliane.stiller@ibi.hu-berlin.de	Task force member	 The Europeana Task force on Evaluation and Enrichments has the following goals: collect enrichment processes, workflows and efforts in the Europeana network including correcting of enrichments through crowdsourcing, assess what they have in common and how they differ, enhance the interoperability of enrichment services/modules, for example by identifying problems which hinder interoperability, determine a set of methods (incl. metrics) to evaluate the impact of enrichments, help participating projects enhance the enrichment services they are creating, by collecting appropriate vocabularies for enrichment and enrichment rules, and pin-point the most promising ways to include human feedback in the workflow.
11/2013- 10/2016	Ontotext	Ontology engineer, esp. for Linguistic Linked Data (was Ontotext PM as well)	MULTISENSOR (Mining and Understanding of multilinguaL content for Intelligent Sentiment Enriched coNtext and Social Oriented inteRpretation) is a 3-year EU funded research project to advance multilingual media analysis technologies. The goal is to enable users (e.g. journalists, entrepreneurs) to attain a comprehensive and exact understanding of topics they are engaged in, not only from their own but from multiple viewpoints. Scanning multiple heterogeneous sources: gather and semantically integrate various local subjective and biased views disseminated via TV, radio, mass media websites and social media. Using sentiment, social and spatiotemporal methods, MULTISENSOR helps to interpret, relate and summarize economic information and news items. Main role: storing and inference service, semantic representation of NLP data using NIF (NLP2RDF), OLIA, MARL, FrameNet, validating RDF data using automatic (RDFUnit) and manual approaches.
10/2014	Michel Dumontier, Stanford University, michel.dumontier@stanford.edu	Contributor	Contributed to <u>Dataset Descriptions: HCLS Community Profile</u> , which is a community standard for describing datasets in the Health Care and Life Sciences domain. Contributed to describing <u>dataset statistics</u> and several other issues.
10/2013- 12/2013	Ontotext	Ontology contributor	Contributed to the ISO 25964 ontology, the latest ISO standard on Thesauri. See Linked Open Vocabularies entry. The Getty work represents the first industrial use of ISO 25946. Defined appropriate combinations of varieties of Broader relations: Generic, Partitive, Instantial (BTG, BTP, BTI), which are first formally defined in ISO.

From-To	Company & Reference Person	Position	Description
8/2013-	Joan Cobb, Getty Research Institute		The Getty Vocabularies (AAT, TGN, ULAN, CONA) are very important and famous in the Cultural Heritage
8/2013- now	Joan Cobb, Getty Research Institute (J. Paul Getty Trust), senior architect & PM, jcobb@getty.edu	PM, Ontology engineer	The Getty Vocabularies (AAT, TGN, ULAN, CONA) are very important and famous in the Cultural Heritage and Digital Humanities communities. Getty has been instrumental in thesaurus development (International Terminology Working Group), setting and applying standards for metadata about cultural objects (CDWA and LIDO) and for describing them (CCO). This project publishes the Getty Vocabularies as Linked Open Data: http://vocab.getty.edu . We use the following ontologies: SKOS, SKOSXL, ISO 25964 for representing thesaurus info; DC, DCT for common properties; BIBO, FOAF for sources and contributors; PROV for revision history; RDF, RDFS, OWL, XSD for system properties; R2RML for implementing the conversion; and a number of Descriptive ontologies (VOID, VOAF, ADMS, DCAT, etc.). We provide the semantic repository (GraphDB=OWLIM enterprise edition, i.e. clustered for high-availability), a customized semantic frontend using Ontotext's Forest, SPARQL 1.1 compliant querying, per-entity export files, data loads with explicit and total statements, etc. The AAT, TGN, ULAN publications are completed. Work is proceeding with CONA (the most complex thesaurus) and involves conversion from CDWA/LIDO to CIDOC CRM. We've also started work on Getty AATA, a comprehensive bibliography & abstracts of literature related to the preservation and conservation of material cultural heritage. We are considering FRBRoo and BibFrame for this publication. The Cultural Heritage community has shown great interest in the semantic publication. I developed the complete mapping specification and worked with the External Reviewers group (includes people from OCLC, Europeana, the ISO 25964 working group). Defined language tags for exotic languages. Helped with implementation of R2RML scripts working off Getty's Oracle database, contributed to the Perl implementation (RDB2RDF) and an R2RML extension (rrx:languageColumn). Developed user documentation (100 pages), sample queries (60 and growing). Manage the project
1/2014-	Susie Slattery,	Ontotext PM,	Europeana Food and Drink (EFD) is a 30-month project to celebrate Europe's culinary heritage by contributing
6/2016	susie@collectionstrust.org.uk: project coordinator	Semantic data integration	food and drink content to Europeana and developing a number of creative and industry-relevant applications. Ontotext's tasks are related to:
			 Contributing Bulgarian recipes, helping other content partners to represent their data as EDM Semantic discovery and classification of FD-related content, developing the EFD Classification based on Wikipedia categories Developing a Semantic Demonstrator application. Others have already expressed interest to use our approaches for discovery and enrichment of content related to History Education (EuroClio) and art (Europeana)
10/2013- 4/2014	Antoine Isaac, Europeana scientific coordinator, aisaac@few.vu.nl. Juliane Stiller, Humboldt- Universität zu Berlin, juliane.stiller@ibi.hu-berlin.de	Task force member	The Europeana Task force on Multilingual and Semantic Enrichment Strategy is motivated by Europeana's goal to ensure that enrichments enfold their whole potential and act as facilitators of access. The main work of the task force consists of developing a multilingual and semantic enrichment strategy. For that, suitable collections are identified as use cases and their metadata fields are analyzed to find matching controlled vocabularies which would be good candidates for enrichment. See final report.

From-To	Company & Reference Person	Position	Description
9/2012- now	Prof Agostino Paravicini Bagliani, University of Lausanne, agostino.paravicini@unil.ch	Invited expert	EC COST Action IS1005 "Virtual Centre for Medieval Studies" (VCMS). The main objective of the Action is to increase accessibility to and integration of medieval research results and tools through improved technological instruments and skills. The VCMS, made possible through exchange and networking within COST, could be a portal providing information on digitalised manuscripts, authenticity lists of medieval authors, bibliographies on medieval cultures and a library of medieval texts. The VCMS could integrate existing databases containing texts on medieval cultures, bibliographical references and dictionary articles.
2/2013- 5/2014	Max Kaiser, Head of Research and Development, Austrian National Library, max.kaiser@onb.ac.at: project coordinator	Ontotext PM, data modeling expert, semantic enrichment	Europeana Creative is a 30-months long European CIP PSP project involving 26 organizations ranging from museums and libraries, to innovation and creative hubs, to proven technical partners It will facilitate the re-use of Europeana cultural heritage metadata and content by the creative industries. It will establish an Open Laboratory Network, create a legal and business framework for content re-use, implement all needed technical infrastructure. It will create five pilot applications in the thematic areas of History Education, Natural History Education, Tourism, Social Networks, and Design, and then conduct open innovation challenges to identify, incubate and spin-off viable projects into the commercial sector. Ontotext participation: Content Re-use Framework. OWLIM is used for metadata storage and search, continuing our work on the experimental Europeana SPARQL endpoint Geographic mapping and transformation algorithms, to be used for the creation and management of cultural routes as required by the Tourism pilot Linking to external web resources (e.g. Freebase, DBpedia, Wikipedia, VIAF, Getty, Geonames).
9/2013	Dr Milena Dobreva, Department of Library Information and Archive Sciences, University of Malta, milena.dobreva@um.edu.mt: TPDL 2013 general chair	workshop organizer	Practical Experiences with CIDOC CRM and its Extensions (CRMEX 2013), a workshop at the International Conference on Theory and Practice of Digital Libraries (TPDL 2013). The CIDOC CRM (international standard ISO 21127:2006) is a conceptual model and ontology with a fundamental role in many data integration efforts in the Digital Libraries and Cultural Heritage (CH) domain. It has spawned various CRM-compliant extensions, and influenced a number of CH data models, e.g. the Europeana Data Model - EDM. The goal of this workshop is to describe and showcase systems using CRM at their core, exchange experience about the practical use of CRM, describe difficulties for the practical application of CRM, and share approaches for overcoming such difficulties. The ultimate objective of this workshop is to encourage the wider practical adoption of CRM.
6/2012- 5/2013	Stefan Gradmann, KU Leuven, Stefan.Gradmann@kuleuven.be: task force convenor	Task force Member	The EDM-FRBRoo Application Profile task force is a working group in the context of Europeana with the objective to enrich the Europeana Data Model (EDM) with concepts from the Functional Requirements for Bibliographic References (object oriented) ontology (FRBRoo), in order to allow precise referencing between original works and derivations (e.g. translations, adaptations, librettos, etc). I worked with people from the Polish Digital Library (Justyna Walkovska) and NTNU (Trond Aalberg) to develop a number of examples on derivative works of "Don Quixote". We developed conversions from RDF to PlantUML for automatic diagramming, see blog at PolishDL . I also helped the PolishDL to develop CIDOC CRM and FRBRoo models and to use Ontotext's RDF repository OWLIM to store RDF data about 3.5M Polish books and cultural objects. This makes it one of the largest CRM & FRBRoo repositories available. See Mazurek, C., Sielski, K., Walkowska, J., Werla, M. From MARC21 and Dublin Core, through CIDOC CRM: First Tenuous Steps towards Representing Library Data in FRBRoo (CIDOC 2012).

From-To	Company & Reference Person	Position	Description
9/2011-	The British Museum (for Ontotext): Dominic Oldman, doldman@britishmuseum.org, IS Development Manager	PM, Ontology Engineer	ResearchSpace (www.researchspace.org) is a project of the British Museum funded by the Andrew W. Mellon Foundation. It aims to support collaborative web-based research, information sharing and web publishing for the cultural heritage scholarly community. The system is based on semantic technologies (OWLIM) and the CIDOC CRM ontology, which supports generic description of cultural artefacts, related events (e.g. creation, acquisition, curation, conservation), annotations, research discourse. It will include Data and digital analysis tools, Collaboration tools, Semantic RDF data sources, Web Publication, research tools such as Image Annotation, Image Compare, Timeline and Geographical Mapping, Semantic Search. Interactive and dynamic JS/AJAX (web 2.0) approaches are used. OWLIM was deployed on Solaris to benefit from the compressing file system zFS. One of the first large-scale practical deployments of CIDOC CRM: 2.5M museum objects, 900M triples. Search is based on the so-called CRM Fundamental Relations, and involves complex reasoning. See Large-scale Reasoning with a Complex Cultural Heritage Ontology (CIDOC CRM) for info and comparison to other CH repositories. Roles: Technical solution and tender; Project management, task tracking, weekly meetings, client relation; Ontology engineering, data model, ETL and data management; Reasoning including OWLIM Rules and Description Logic; Research of related tools and projects; Business analysis
7/2011	Edamam (for Ontotext): Victor Penev, victor@abv.bg, owner. Founder of NetInfo, Bulgaria's largest Internet properties holding	Data processing, text analysis	Edamam (www.edamam.com) is a semantic knowledge base of foods, recipes, nutrients, cooking etc. Recipes are crawled from numerous sites; processed to extract knowledge about ingredients, cooking times, nutrition information; and presented through various dynamic and intelligent interfaces that allow sorting and filtering by a number of preferences. It was highlighted in a SemTech 2011 case study
	BG-KR IT Cooperation Center (ITCC): Jaehong Yoon, yoon4me@gmail.com , ITCC coordinator	Advisory Board member	Development of joint BG-KR projects, in particular application of Semantic Technologies to Cultural Heritage and Open Government Data publishing. Publishing of Bulgarian cultural heritage to Europeana (www.bulgariana.eu)
9/2009- 11/2010:	Sirma IT Consulting; <u>Tsvetan.Alexiev@sirma.bg</u> , CEO Sirma Solutions Corp	Founder, Director	Full-service IT consulting: feasibility studies, gap analysis, system conception; IT strategy; Enterprise Architecture, Data Modeling, and Application Integration; Tender development, evaluation; evaluation of programmes, projects and proposals; IT security, audits; Project Management consulting, training, project cycle management, methodologies (PMBOK, PRINCE2, TEMPO); Business analysis and requirements specification. Manage EU Framework Contract "Beneficiaries" (FWC BEN) Lot3 "Telecommunications and information technologies, with consulting assignments in all phases of the project cycle.
	Ministry of Transport, Information Technology and Communications; Parvan Rusinov, prusinov@mtitc.government.bg, deputy minister	Workgroup Member	Member of the workgroup "Bulgaria e-Government Strategy". Focusing on the e-Government data model (Register of Information Objects, XML Schemas, Unified Document Exchange System and related topics). Establishment of web-based collaboration system
5/2010	Ministry of Education, Youth and Science (for Sirma IT Consulting); Lora Pavlova, l.pavlova@mon.bg , National Contact Point for FP7 Region of knowledge	BA, PM	EU project "Research Infrastructures: Foresight and Impact" (RIFI), FP7- INFRA-2008-3.0, project 228293. Establishment of website and content management system

From-To	Company & Reference Person	Position	Description
	Ministry of Education, Youth and Science (for Sirma IT Consulting); Lora Pavlova, l.pavlova@mon.bg , National Contact Point for FP7 Region of knowledge	Business Analyst	EU project "Networking on Science and Technology in the Black Sea Region" (BS-ERA.NET), FP7-INCO-2007-3.1.2, project 226160, task 3.1 "Designing of a Joint Evaluation and Administration System (JES) for future multilateral calls". Responsibilities: JES concept, business analysis, UML use-case modeling, requirements specification.
	Sirma Solutions); Georgi Bonchev,	PM, TL for Task1, Lead	Enhancement of the Information Systems at the Office of Prosecutor General for Combating Corruption (IDF Grant WBTF 058170-BUL CS-4184, financed by the World Bank).
	gbonchev@prb.bg, IT Director POB	Analyst	 Task1: concept, process modeling, business modeling, analysis, market analysis, hardware and software specifications for reengineering and future development of the Unified Information System (UIS) of POB, a system that handles all aspects of prosecutor case management. Includes integrations to UISCC and other government systems, e-Services, compliance with the Electronic Governance Law. Complete tender dossier for Operating Program Administrative Capacity Task2: development of Data Warehouse and Business Intelligence reports for UIS. Task3: development of anti-corruption system where prosecutors declare their annual earnings, other sources of income, real estate, other properties; purchases and sales during the year. Integration with the system of Bulgarian National Auditors Office Responsibilities: developed technical offer, managed the project, lead Task1, perform business modeling and analysis. Technologies: UML, RUP, Oracle 10g, Oracle Application Server, Oracle Business Intelligence Enterprise Edition, ARIS modeling, JEE5, Redhat Enterprise Linux
11-12/ 2009	European Commission; Arian.ZWEGERS@ec.europa.eu, DG INFSO	FP7 Proposal evaluator	Proposal evaluator for the 7 th Framework Program for Research and Development in IST (EU IST FP7) Call 5 Objective 1.2 "Internet of Services, Software and Virtualisation". Topics include Service Architectures and Platforms for the Future Internet, and Highly Innovative Service / Software Engineering
	Sirma Solutions & Sirma ITT (for Bulgarian Customs Administration); miroslav.chervenski@sirma.bg, PM	IT Consultant	Excise Management System phase 2.1: project PHARE BG 2007/019-303.06.04 "Development of national system for comprehensive Excise Management by the Customs Administration". Role: consulting on project management and system architecture
5-8/2009	University of Ruse; Katalina Grigorova, <u>katya@ami.ru.acad.bg</u> , Director, Informatics and IT department	Masters level lecturer	Design and lecturing on IT/Software Project Management, Masters level university program on Software Engineering
5-8/2009	Varna Free University; Pavleta Krysteva, <u>pavleta_vfu@abv.bg</u> , program coordinator	Masters level lecturer	Design and lecturing on IT/Software Project Management, Masters level university program on Software Engineering

From-To	Company & Reference Person	Position	Description
7/2008- 10/2009	Bulgarian Customs Administration (for Sirma Solutions); Teodor.Martev@customs.bg, PM	PM, Lead Business/Process Analyst, Data Modeler, overall project planning and system architecture	Development of Export Control System phase 2 (ECS2): part of DG TAXUD eCustoms initiative, introducing electronic paper-free customs environment in the EU. ECS2 extends the exchange of Export Movement data between Office of Export and Office of Exit with new business objects (summary declaration), new processes (Follow-Up, Export Query, Risk Analysis), Security Amendments to the Customs Code as per Reg (EC) No 648/2005, integration with numerous systems, both national and trans-European (BICIS, EORI, RMF, Simplified Declaration Module, other Government Administrations). Nominated for "IT Project of the Year 2009" by Computerworld Bulgaria. Technologies: RUP, UML, J2EE, XML, JSF, Informix, process modeling, BPMS (jBPM). Project size: 13 months, 35 staff peak, 380 p/m effort
3/2008- 7/2008	Bulgarian Council of Ministers, Ministry of Education, Ministry of Health, Ministry of Regional Development, Ministry of Labor and Social Policy, Ministry of Internal Affairs, Roma NGOs (for Sirma Solutions); Ilka Kaydzhiyska, I.Kaydzhiyska@Government.Bg, state expert, Directorate Ethnic and Demographic Issues	Team Leader (BA and system evaluation), PM	Project PHARE BG 2006/018-164.06.01"Technical assistance for creating an overall concept, needs analysis, technical documentation and specifications, participation in tender evaluation for a Common Monitoring System for project BG 2006/018-343.01.02 Improving the status and integration of ethnic minorities with special focus on Roma". Evaluation of existing systems, beneficiary interviews, system concept, feasibility study, needs analysis, business specifications, UML modeling, hardware and software specifications, market analysis adn tender documentation preparation. Technologies: Enterprise Architectre, OLAP, statistical indicators, reporting and charting toolkits, GIS and mapping, project/grant management, portals, collaboration, web content management.
5/2008	Finpiemonte S.p.A; Erica Gay,	Proposal Evaluator	Evaluation of project proposals for the Converging Technologies call 2007 of Piedmont Region, Italy
5/2007- 1/2008	Bulgarian Customs Administration (for Sirma Solutions and IBM Bulgaria); Stoyan.Ivanov@customs.bg, IT Head RMD Burgas and PM; Teodor.Martev@customs.bg, PM		Projects in the Customs area involving BICIS and Export Control System. Team lead for the Lotus Forms part of the user interface. Participate in project planning, system architecture & design, team leading and coordination. Technologies: Websphere Process Server, Websphere Portal, Lotus Forms; Rational Portfolio Manager, Rational ClearCase, Rational ClearQuest, Rational Software Architect.

From-To	Company & Reference Person	Position	Description
1/2007-	Company & Reference Person Romanian Ministry of Public Finance (MoPF) and National Customs Administration (RNCA) (for Sirma Solutions and ACE); Adrian.Popescu@mfinante.ro, General Director MoPF IT; Adrian Costin, acostin@customs.ro, IT director RNCA	tender dossier, specification of	Description Technical assistance for project elaboration and preparation of tender dossiers for all Phare 2005 projects of MoPF DGIT and RNCA IT department, amounting to 40MEUR. Topics covered: development of internet portal forms for electronic submission by taxpayers, Adobe Intelligent Forms, centralization and migration of core MoPF applications from Oracle Forms 6 to internet version (including Human Resources management and Fiscal/Financial Audit), intranet portal and collaboration system based on IBM WebSphere Portal and Workplace, central Document Management System with archival/storage and disposal based on DB2 Content Manager and Tivoli Storage Manager, deployment of Identity Management and user provisioning from HR system, IT Security policies and procedures. Improvements to the inter-operation between MoPF and RNCA including unification of data models; technology migration for RNCA including platform upgrades and migration from ASYCUDA++ to ASYCUDA WORLD web-based version. EMCS2 (EU TAXUD Excise Movement Control System phase 2), National Excise Application covering registration/authorization of tax warehouses and excise traders, national and international movement of excise goods. Development of specifications for hardware and software supply.
10/2006	Unicredit/Bank Austria/HVB (Bulbank/Biochim/Hebros) (for Sirma Solutions); Kristin.Krumov@mail.bg, Head of IT (former)	PM consultant	PM Consulting for triple bank merger project. Provided PM consulting in the Infrastructure and System Integration workstream of the IT Cluster. Specific areas (sub-projects) addressed include: Data Center establishment (IBM hardware, AIX, Oracle Enterprise and RAC for core and satellite bank systems), physical, electrical and VAC; Network & Telecommunications (nation-wide network topology and design), Distributed Environment (establishing Active Directory, Windows domains and common services such as), System Integration (SOA approaches for integrating the core banking system FlexCube with 25 satellite systems), Security and User Profiling (recommended the use of an Identity Management solution), Service Management (ITIL-based, SLAs, Service Model and Catalog, Mercury monitoring tools), Historic Archiving and Retention. Technologies used: Microsoft Project, Microsoft Project Server, Inserted sub-projects, web progress and status reporting, weekly workstream status reports, plan development, coaching individual Project Managers, review and recommendations for Enterprise Architecture and SOA-based Enterprise Integration approaches.
12/2006	BNP Paribas Personal Finance (formerly JetFinance) (for Sirma Solutions); teodor.yantchev@jetfinanceintl.com, IT director	analyst, project manager	Development of ERP System "JETIX". The system automates most business processes in the largest consumer credit company in the country. Includes credit application processing, scoring, credit administration and dossier management, mailing, risk management, collection, bank clearing, installment (payment) matching, accounting, integration with Maconomy, etc. System supports about 100 different business roles (positions). Duties: business analyst, project manager, UML design, business process modeling. Technologies: UML, RUP, SOA, SQL Server 2005, SQL Analysis and Reporting Services, MS.NET 2.0, C#, Windows Workflow Foundation (BPM).
10/2006	Bulgarian Customs Administration (for Sirma Solutions for IBF); Krassimir.Nikolov@customs.bg, Deputy Director General BCA	Independent software expert and Team leader	Technical Assistance for finalization of Terms of Reference for PHARE project "Extension of Bulgarian Integrated Customs Information System (BICIS) functionality" (6.3MEUR) and participation in the respective tender evaluation. Beremska 12 BG-PAO-FWC-BIS. Serving as senior international software expert (independent evaluator) and team leader. Technologies: SOA, J2EE, BPM, RUP, Rational Rose.
10/2006	European Commission; <u>Charles.MACMILLAN@cec.eu.int</u> , DG INFSO	Proposal evaluator	Proposal evaluator for the 6 th Framework Program for Research and Development in IST (EU IST FP6 Call5) in the 'Software and Services" Strategic Objective.

From-To	Company & Reference Person	Position	Description
11/2005,	Umicore, Energy sector executives	Project	PM training to the staff of Investment Projects department of Umicore (Aurubis) (18 people, 4-day course) and
3/2005	(for Sirma Solutions);	Management	Energy sector executives (15 people, 3-day course). Followed PMBOK, covered Project Management Context,
	<u>Dimiter.Angelov@umicore.com</u> ,	trainer	Processes, Integration Management, Scope Management, Time Management, Cost Management, Quality
	Investment Projects director		Management, Human Resource Management, Project Teams, Communications Management, Risk
			Management, Procurement Management, Developing a WBS, Estimating, Scheduling, Executing and
			Controlling Processes, Integrated Change Control. Trainee management, certificates.
	Bulgarian Patent Office, Bulgarian	Enterprise	PHARE project "National Intellectual Properties Information Exchange System" (NIPIES). Inter-government
	Customs Agency, Ministry of		system for information exchange, collaboration and dissemination that integrates Intellectual Property (IP)
	Culture, Ministry of the Interior and	manager	descriptions across all government departments dealing with IP issues. The system is part of Bulgaria's
	Ministry of Justice (for Sirma		obligations for ascension to the European Union. Developed technical offer, performed business analysis with
	Solutions); Boyko Philipov,		stakeholders from various government departments, organized staff education and certification, managed the
	<u>bphilipov@bpo.bg</u> , IT director BPO		project Technologies: UML, RUP, sophisticated software architecture based on IBM products, including
11/2004	D	G	Business Integration Server, WebSphere Portal and DB2 Content Manager.
	Prosecutors Office of Bulgaria (for		PHARE project "Unified Information System" (UIS) for POB, a system that handles all aspects of prosecutor
	Sirma Solutions, Acsior, Rila	Project manager	and investigator case management. UIS enhancements: 1. Module for communication between UIS and the
	Solutions); Georgi Bonchev, gbonchev@prb.bg, IT Director		national Unified Information System for Combating organized Crime (UISCC); 2. Enhancements to the user
	POB		interface and document generation modules to enable more convenient and better integrated use of the system. 3. Migration of the system (database and web servers) from Windows to Enterprise Linux. These enhancements
	FOB		enabled the nation-wide deployment and acceptance of the UIS system, and integrated it with the national
			UISCC system, both of which improve the organizational efficiency of POB and enhance its crime-fighting
			abilities. Responsibilities: developed technical offer, managed the project and consortium relations, managed
			technical architecture, performed business modeling. Technologies: UML, RUP, Oracle 10g, Oracle Application
			Server, ARIS modeling, J2EE, Windows 2000, Enterprise Linux
1/2005-	Ministry of Education and Science	Project manager	Current Research Information System (CRIS) and Information System for Management of Scientific Research
3/2005	(for Sirma Solutions); Albena	l rojeet manager	(ISMSR). CRIS is the Scientific portal of Bulgaria: it manages data about all national and international research
	Vutsova,		projects, scientific organizations and researchers, as well as research results such as patents, publications and
	a.vutsova@minedu.government.bg,		products. ISMSR manages public funding, review and selection of research projects, execution and monitoring
	Director, Scientific research and		of research projects. The two systems are of vital importance for invigorating and publicizing scientific research
	projects		in Bulgaria. Based on the Common European Research Information Format (CERIF) to facilitate exchange with
			other European research information systems. Initiated the project, managed during inception phase
	World Bank (for Sirma Solutions);	Business/	Trade and Transport Facilitation in the South-Eastern Europe website (<u>www.ttfse.org</u>): Business/process
			analysis, system architecture and design. The project involves enhancements to site functionality, content,
	TTFSE coordinator	architect	administrative functions, and the Route Planner GIS application.
	Sirma Solutions;	Enterprise	Business Requirements Analysis for the information needs of several business IT systems, including: Levski
1/2004	Tsvetan.Alexiev@sirma.bg, CEO	architect,	Spartak Insurance Company business operation system, Ministry of Defense "Rest and Recreation" Executive
		Business analyst	Agency reservation system, EuroLion consumer credit management system. Technologies: stakeholder
			interviews, Zachman framework analysis, business analysis, RequisitePro

From-To	Company & Reference Person	Position	Description
2/2003- 7/2003:	SEP Bulgaria	Architecture consultant	Architectural consulting for Mobile Payments (MPAY), a system to pay for goods and services using mobile phones for Bulgaria. Devised and described the high-level mPay architecture, considered security aspects of the system. Technologies: J2EE, XML/XSL, UML, RUP, business analysis, use cases, Java 1.4, EJB, RMI, JSP, JME, Jiraffe (Sirma framework), Weblogic application server, WebSphere application server, Tomcat application Server, MS SQL Server, Oracle 10g, mobile protocols: USSD, SMS;
3-4/2003	Transport Canada; Jonathan Rose, rosej@tc.gc.ca, Senior Analyst, Risk Evaluation Dangerous Goods		Transport Dangerous Goods Online Accident Reporting (TDG OAR), system for web-based reporting of accidents involving dangerous goods, part of the Government On-Line initiative at Transport Canada. Evaluated business processes, conducted domain expert interviews, modeled the business domain, developed a model of inclusion for Means Of Containment and corresponding diagrams. Developed database model in Erwin, generated physical schema for Oracle 8i. Developed online help from the user guide, linked help in the system. Selected and managed the team. Developed the project plan, delivered status updates and bi-weekly reports to the project authority, managed the overall progress of the project. Technologies: business modelling based on UML, GOL CLF, ASP, VBScript, VB COM, ADO, Oracle 8i, Erwin 3.5, Microsoft Word, HtmlTidy.
9/2002	Elections Canada (for WorkLogic Corp); Phil.Hopkins@Elections.ca, systems support	PM, business analyst	The ECSN1 & ECSN2 (Elections Canada Support Network) systems ran the Canadian Federal Elections in 2000, 2002, 2006, 2008. Performed requirements gathering and analysis, wrote the system specification and project proposal, developed project plan, managed and tracked the project, redesigned database schema for better manageability and speed, participated in load-testing, optimization and hardware sizing. Technologies: ASP, VBScript, ADO, Oracle 8i, Erwin 4.0.
6/1999- 11/2002	Library of Parliament (for WorkLogic Corp); Mike Graham, GrahaM@parl.gc.ca, director Information & Documentation	PM, business analyst, integration designer	ParlRef, a core line-of-business Library Reference system. Integrated with: ParlCat (web-enabled catalogue system), WorkLogic Orgvisiion (data about clients and staff), Docuvisiion (documents relating to FAQs). Specified the system (client selection/creation screens, Intranet Online Request System, ParlCat and Docuvisiion integration), gathered and analyzed requirements, managed the project. Technologies: UML, RUP, VBScript, JavaScript, MSSQL 7, ADO, Windows NT Logon.
10/1998- 7/2001	Human Resources Development Canada (for WorkLogic Corp)	PM, business analyst	National Occupational Classification (NOC) web site and search engine. Managed the project, specified enhancements, performed ongoing administrative tasks (error log monitoring, watchdog, summarization of traffic reports). Technologies: Oracle 8.0, Netscape Enterprise Server 4, Server-Side JavaScript.
10/2001	Human Resources Development Canada (for WorkLogic Corp)	PM, business analyst	Online Data Intranet and Information Network (Odiin), a Grants and Contributions system for the Youth Initiatives Directorate. Specified and managed re-engineering from Borland IntraBuilder and Access to Java and Oracle. Specified and managed system improvements. Technologies: business modelling based on UML, Java, JSP, Servlets, JRun 3.0, Oracle 8i
12/1992- 5/1998	Sirma Group	consultant	While doing my PhD, I did various research tasks, strategic consulting, helped develop system architectures and defining project scopes. Transport Canada Briefing Notes (TCBN). Comparative analysis of Object Database Management Systems. Competitive analysis of Document Management Systems and web-based DMS interfaces, developed company positioning regarding DMS.

Publications

See http://vladimiralexiev.github.io/pubs. Most publications and accompanying presentations are available for download. Statistics:

Books, thesis, conference proceedings		
Tech reports, manuals, deliverables, ontologies	25	
Conference papers, journal articles		
Presentations, posters, blog posts		
TOTAL	69	

Awards and Achievements

- 1997-1998: University of Alberta Dissertation Scholarship.
- 1997: Andrew Steward Memorial Graduate Prize to present at an academic conference.
- 1995-1996: Killam Memorial Scholarship, University of Alberta.
- 1992-1994: University of Alberta PhD Scholarship
- 1988-1991: Annual Excellence Scholarship, Technical University of Sofia
- 1986: 1st Place Winner, Bulgarian National Programming Olympiad