

Curriculum Vitae

Milan Trninić

Software Architect, Senior Software Engineer

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Date of birth: 20.08.1969

Citizenship: Serbian, Canadian

Address: Vancouver, Canada; Belgrade, Serbia

Marital Status: married

Languages: English: fluent, French: learning, Serbian: native

Education, Training and Designations

2005	M.Sc. designated by credential evaluation	The Trustforte Corporation, NY, USA
1996	4.5 yrs program: Electrotechnic School, Computer Technology and Informatics	University of Niš, Niš, Serbia
1987	Computer Programmer Diploma	Grammar School, Sarajevo, BiH
2010	Health Level 7 (HL7) training – ongoing	HL7 International (hl7.org), MI, USA
2006	Certified Scrum Master	NetObjectives, Bellevue, WA, USA
1998	UML for requirement Analysis	Software Productivity Centre, Vancouver

(and a number of additional courses since 1996)

Profile

A professional with over 12 years of industry experience, participating in most of the activities in the software development and integration process. Successfully performed in the roles of software architect, system analyst, domain and data modeller, software engineer and developer, technical team lead, specification writer, course instructor, conference delegate and presenter.

Mr. Trninić has worked in different domains, including insurance (life and health), telecom (ordering system), geospatial (development of the Geo-Web), cable TV (device monitoring, control and automation). His focus, generally, are distributed software systems for different target domains.

Highlights

- Broad skill range, in-depth understanding of computer systems; active in the industry since 1986.
- Strong software/system architecting skills. Architected various software elements including distributed / SOA based ones. Worked within TOGAF framework, used RM-ODP, 4+1 Model View and RUP.
- Excellent modelling skills. Worked with various approaches (object, relational, hierarchical, ER, custom, etc.) and domains. Authored elements of Geography Markup Language. Extensive XML modelling experience.
- Strong knowledge of database concepts and experience with relational and XML databases.
- Excellent software engineering skills. Researched, analyzed, planned, designed and implemented ideas from conception through deployment.
- Excellent knowledge of various development platforms, concepts and tools: Java / J2EE, distributed platforms (SOA, CORBA), XML based technologies, .NET, C++ and many others.
- Designed adapter solutions for mainframe and worked in the past with COBOL.
- Very good communication skills: wrote presentations, articles, OGC / ISO specifications, delivered courses. Attended technical workshops and conferences, presented technology achievements and ideas and advocated solutions and approaches.
- Successfully collaborated with people from a large number of well known international organizations including Microsoft, Oracle, OpenGIS, Autodesk, ESRI, Hitachi, NTT Japan, Shell Oil, government bodies (Canada, US, UK, EU), and many others.
- Worked on significant number of projects throughout my career. The list can be found at <http://www.konceptis.com> (Experience, Projects View)

2006 – 2008

*Consultant, System Analyst**Telus Communications
Vancouver, Canada*

Reporting to Project Manager, worked on project “Imagine” - development of large new generation ordering system. The system is based on distributed platforms, notably J2EE and Amdocs OMS and uses a large number of other technologies including mainframe and custom ones. Participated in two official phases and releases.

Technology: J2EE, Amdocs OMS, mainframe, large number of other technologies

- Served as a liaison between business, architecture and technical teams. Collaborated with solution and enterprise architects, business analysts, agents, developers, testers and managers.
- Delivered design and interface specifications, system, impact and problem analysis, change request documents.
- Translated business requirements and architectural guidelines into design and collaborated with developers to ensure quality implementation.
- Analyzed various supporting and legacy systems and designed adapter solutions.
- Troubleshoot defects by reviewing application code, business rules and processes, suggested solutions and provided design changes and guidelines to implement fixes.
- Designed components for high throughput and demanding performance requirements (e.g. update of 300K accounts).
- Led execution of tasks and coordinated teams in the process.

2000 – 2006

*Product Architect, Senior Software Engineer**Galdos Systems
Vancouver, Canada*

Reporting to Product Manager and CEO, worked on the development of distributed web infrastructure (geo-spatial web) for wide area geo-spatial domain. The environment required intensive use of XML (content), Java, J2EE and .NET (procedural) and many international specifications and standards (OpenGIS, W3C, ISO, IETF).

Technology: J2EE, GML, XML, ISO, OpenGIS, RM-ODP, 4+1 View Model, .NET

- Author, editor or contributor to several OpenGIS specifications and discussion papers some of which became ISO standards (GML, WFS, Filter, WMS). Researched geospatial aspects such as geometry, topology, metadata, coordinate reference systems, styling, ISO compliance. Contributing author to the first book on Geography Markup Language. Participated in standard development for different geospatial domains such as location based services. Created UML and XML models, wrote and managed GML schemas.
- Architected, led teams and developed FreeStyler suite – a web mapping service for interoperable discovery, retrieval and visualization of geo-spatial (GML) data. Contributed to the architecture and refactoring of Cartalinea, a geospatial data web service based on OpenGIS WFS interface and GML. Architected and implemented interoperable, web-based Coordinate Reference System Registry synchronized with the European Petroleum Survey Group (EPSG) CRS database.
- Participated in architecture specification, requirements analysis, information modelling, integration and / or development for a number of geospatial systems, including local land information model, national transportation sensor network, SVG map and routing service for mobile phones, hydrographic data mapping, census data management. Performed analysis and mapping of relational models to GML.
- Designed and developed APIs, frameworks, object models, applications, Java Swing GUIs. Some examples are GML object models and APIs, GML encoding and API for JPEG2000, GUI framework for Javascript (AJAX-like) and Java, map viewer client, 3D GML modeling client, emergency response client, SAML / XACML security portal.
- Led a project to evaluate a number of commercial databases, such as Oracle and X-Hive targeted for storing of geo-spatial data.
- Delivered GML courses, participated in the international geospatial technical conferences, presented and advocated ideas and approaches, active in OpenGIS working groups.

1999 *Consultant, Configuration Management* *Creo Inc. (Kodak)
Vancouver, Canada*

Technology: Unix, shell, Perl, ClearCase

Worked on release management for company's large digital printing workflow software system.

1997 – 1999 *Software Engineer (junior through senior)* *Scientific-Atlanta (Cisco)
Vancouver, Canada*

Reporting to the Manager of R&D, participated in the full cycle design, development, implementation, and deployment of the three-tiered distributed software system for monitoring and automated control of headend systems deployed by cable companies.

Technology: C++, Corba, MFC, Ilog Views, Windows, Solaris

- Performed requirements analysis, design and resource estimation.
- Participated in development and refactoring of the software architecture and design.
- Developed and maintained Data Services component of the system.
- Designed, developed and maintained a number of other components and tools, such as parsers, notification support, device inventory and configuration, software installation scripts.
- Designed and developed GUI interfaces using MFC and Ilog Views. Developed a Java AWT device monitoring front-end (applet).
- Implemented support for various device protocols such as RS-485, RS-232, LonWorks, Iris.
- Organized the implementation of the design as a leader of 2-3 member groups.
- Performed on-site installation and performance analysis.

1986-1994 *co-op terms* *Sarajevo, BiH*

These were similar to coop terms. I was working while studying, and not all the time. The total would add up to 1-2 years.

Roles: Software developer, Software tester, Course instructor, Desktop publishing operator

Companies: City of Sarajevo, ZOI-DATA (organizer of Winter Olympic Games), Evening News, Svjetlost Publishing

Technology: DOS, Assembler, Pascal, Windows, IBM PC

Selected Publications

(Full list at <http://www.konceptis.com> - Publications)

- **[Specification, contributing author]** "Geography Markup Language", OpenGIS, 2000 – 2003
<http://www.opengeospatial.org/standards/gml>
- **[Book, contributing author]** "Geography Mark-Up Language: Foundation for the Geo-Web", John Wiley & Sons, Ltd., 2004, (The first book on GML language.)
<http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0470871539.html>
- **[Article, author]** "OO, XML, and GML: Are angle brackets a flexible modeling material?", JavaWorld, 2005 <http://www.javaworld.com/javaworld/jw-09-2005/jw-0905-xml.html>
- **[Presentation, author]** "GML Application Schemas", 2002, Vancouver, BC,
<http://www.trninic.info/software/GMLAppSchemas.ppt>

Services and affiliations

2006 - present	Volunteer Reviewer	IEEE Software, DC, USA
2006 – present	Member	International Association of Software Architects
2003 – 2006	Revision Working Groups	Open Geospatial Consortium, MA, USA
2002 – 2005	Associate Member	World-Wide Institute of Software Architects