

Igor Antonyak

Senior software engineer/ Software Architect/ PL-SQL Developer

Holland, PA - Email me on Indeed: [indeed.com/r/Igor-Antonyak/c702244a237e7a5b](https://www.indeed.com/r/Igor-Antonyak/c702244a237e7a5b)

◆ Technology professional with over 20 years of extensive successful experience leading development of innovative distributed, multi-tier, cross-platform enterprise software systems. Strong expertise in the real-time firmware applications development and maintenance

◆ Strong industry knowledge and over 10 years of experience in building multi-tiered systems with a focus on web services (WCF, AJAX, SOAP, RESTful, XML-RPC, HTML/XSL, XML, Servlets, JSP/ASP/ASP.NET).

◆ Hands on experience and solid understanding of database (Oracle, Informix, SQL Server, MySQL, JDBC/ ODBC/ ODP.NET/ Entity Framework) data and process modeling tools and persistence techniques.

◆ Solid experience through all phases of technology system rollout including business analysis, architecture design, prototyping, implementation, testing, and deployment.

◆ Strong object-oriented analysis, design, and programming skills (UML, ER-diagrams).

◆ Significant expertise with various advanced cutting-edge technologies, enterprise systems architectures, business modeling, distributed object-oriented computing, databases, transaction processing, and legacy systems integration.

◆ Excellent written and oral communication and presentation skills.

Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

Senior software engineer/ Software Architect/ PL-SQL Developer

Merrill Lynch - Pennington, NJ - August 2015 to February 2016

Provide business analysis, technical specifications, LOE and coding for CDOL business and marketing software projects. Objects / Database Models structural and functional design.

- ER data model diagrams / UML class models design / business analysis for new and legacy systems.

- Provide architecture design for DOCUMENTUM system conversion from single into multiple channels mode.

- Development Java/JDBC, PL/SQL, C# for MS.NET 4.5 backend and Oracle ETL applications for business-to-business communication for customer document management system based off DOCUMENTUM. Target was to convert single node DOCUMENTUM structure into 6 nodes grid solution.

- Upgrade legacy ASP.NET-2.0 documents data collection systems to ASP.NET-4.5.

- Development Oracle objects (triggers, views, stored procedures, packages, ETL, DDL etc) for legacy DOCUMENTUM threads synchronization.

- Provide management for continuous integration build process based off MLTP-process for MS.NET desktop and web applications.

- Provide client side script code conversion for legacy web applications compatibility with Firefox, Chrome and IE11.

- Introduce Security Source Code Assurance for legacy ASP, ASP.NET and MS.NET desktop applications with source code rewrite based off AUTHZ-framework.

- Introduce SQL performance analysis in SDLC based off SQL Developer and TOAD.

- Identify problems uncovered by testing and customer feedback, and correct problems or refer problems to appropriate personnel for correction.

- Maintain all versions of the code using TFS.

Senior software engineer/ Software Architect/ PL-SQL Developer

JP Morgan Chase - Wilmington, DE - June 2014 to August 2015

Provide business analysis, technical specifications, LOE and coding for credit card business and marketing software projects. Objects / Database Models structural and functional design.

- ER data model diagrams / UML class models design / business analysis for new and legacy systems.
- Provide architecture design for business-to-business credit card transactions communication.
- Provide architecture design for legacy systems infrastructure and source code conversion to meet new security requirements for banking credit card line of business (like SQL injection and Cross Site Scripting).
- Development C# /VB.Net MS.NET 4.5 backend and SQL Server/ Oracle ETL applications for business to business communication with major credit card providers (Visa, MasterCard).
- Upgrade legacy classic ASP-based credit card services data collection systems to ASP.NET-3.5 and ASP.NET-2.0.
- Development SQL Server and Oracle objects (triggers, views, stored procedures, packages, ETL, DDL etc).
- Provide management for continuous integration build process based off JENKINS/ FORTIFY for MS.NET desktop and web applications.
- Provide client side script code conversion for legacy web applications compatibility with Firefox, Chrome and IE11 (from VbScript to JavaScript).
- Design KORN shell scripts for custom vendor data extraction into CHASE's proprietary ETL format.
- Introduce Security Source Code Assurance for legacy ASP, ASP.NET and MS.NET desktop applications with source code rewrite.
- Introduce SQL performance analysis in SDLC based off SQL Developer and TOAD.
- Provide architectural analysis and redesign for legacy applications from MS OFFICE to ASP.NET and backend MS.NET desktop applications.
- Identify problems uncovered by testing and customer feedback, and correct problems or refer problems to appropriate personnel for correction.
- Maintain all versions of the code using SVN.
- Develop testing strategies which would be suitable to test the modules impacted as a result of both the migration & enhancement requirements.
- Provide inter-team communication between BA and IT teams as a part of SDLC.

Senior software engineer

PrintMail - Newtown, PA - January 2014 to June 2014

Provide business analysis, technical specifications, estimates and planning for the corporate software projects. Objects / Database Models structural and functional design.

◆Active full cycle code design, technical writing and maintenance for distributed corporate desktop systems based off 4 production branches. Corporate infrastructure is designed using 4 MS Access databases integrated with central SQL Server 2008 R2 databases:

- ER data model diagrams / UML class models design / business analysis for new and legacy systems.
- Development MS.NET 4.5 backend, VB6 frontend and SQL Server DTL applications.
- Develop WCF based end client e-statements delivery system.
- Upgrade legacy VB-6 based production services data collection system to centralized MVC4/ ASP.NET solution with ASPX and Razor view parsing. Provided HTML5/CSS3 web design for MVC views. for purpose of billing process accuracy and performance improvement.
- Development SQL Server objects (triggers, views, stored procedures etc).
- Design and implement QuickBooks database integration with production based off API libraries for billing system.
- Handling IIS application environment in development and QA environment.
- Provide data maintenance and database backup/ restore on a daily basis.
- Introduce Quality Assurance beta testing environment and VSS software versioning.

Senior Software Engineer/ Software Architect/ Tech Lead

Lexicon Pharmaceuticals, Inc - Princeton, NJ - 2004 to January 2014

Senior software engineer, Software Architect, PL/SQL Developer

- ◆ Technical leader and manager for the Cheminformatics IT team out of 5 developers.
- ◆ Provide business analysis, technical specifications, estimates and planning for the corporate software projects. Objects / Database Models structural and functional design.
- ◆ Active full cycle code design, technical writing and maintenance for the corporate INTRANET systems:
 - ER data model diagrams / UML class models design / business analysis for new and legacy systems.
 - Provide architecture design for various ASP.NET web applications, SOA/ RESTful webservice and SharePoint document management systems.
 - WEB-services design for the applications distributed connectivity (JSP/EJB to ASP.NET) and common shared resources usage (label printing, chemical replication, precision weighing, etc).
 - Web development for the IIS-based internal business operations INTRANET portal.
 - Development for corporate legacy desktop systems.
 - VB.NET/C# libraries design for the application's business layer (Active Directory authentication, BI, Web Controls, ORM abstraction layers, ActiveX controls etc)
 - Provide migration from classic ASP-based to ASP.NET applications and VB6 desktop applications conversion to ASP.NET based off VB.NET.
 - Provide integration between legacy Ms.Net 1.1 and Ms.Net 4.0 based systems from INTRANET portal.
 - Design ASP.NET event driven User Controls (client side and backend), JavaScript objects and libraries, JavaScript objects for AJAX / JQUERY / MagicAJAX frameworks, XSLT style sheets.
 - Convert ASP.NET chemistry object attributes registration system into AJAX/JQUERY/WebAPI single page application.
 - Create WebAPI modules for analytical equipment API exposure for non-Windows commercial applications.
 - Design multi-thread search engines for processing data from multiple datasources based off WCF.
 - Develop HttpModules for the Web applications flowchart validation and security.
 - Design custom ActiveX controls for the Client-side connectivity with custom equipment (scanner, scale etc).
 - Design objects, packages for Oracle 8i/9i/10g/11g-RAC. Provide Oracle objects performance optimization and scalable structure using new PL/SQL 11g2 features(XML DB, DBMS_TEXT, ref cursor data type, etc).
 - Build enterprise data access business layer based off intensive usage of Oracle's PL/SQL for stored procedures and functions.
 - Design triggers, views, stored procedures for SQL Server based systems using TSQL and C# (ver. 2005, 2010).
 - Design chemistry data management PL/SQL objects for using Accord Chemistry Cartridge (ver. 3.5, 5.3, 7.0).
 - Migrate chemistry data management PL/SQL objects from Accord Chemistry Cartridge to DIRECT Cartridge 8.0.
 - Develop SharePoint 2007 document libraries system integration and management with ASP.NET applications and MOSS SDK.
 - Develop sequential workflows for various INTERNET / INTRANET preclinical document systems based off SharePoint 2007.
 - Develop DLL libraries for corporate PDF documents (preclinical, analytical, MSDS, etc) management and paring system using C# and SharpPDF.
 - Java-objects (JavaBeans) design for the LINUX-based systems interface with corporate PL/SQL data layer.
 - Develop LINQ-based libraries for custom filtering and ordering of ADO.NET output datasets.
 - Migrate legacy ASP.NET page postback applications to MVC3 pattern as a part of application environment restructuring.
 - Migrate legacy desktop VB6 applications to WinForms MS.NET platform.

- Support and upgrade for the VB6 desktop chemistry applications, NANT-based make-processes, NUNIT-based test system, VSS branching and versioning, Oracle databases synchronization between production, testing and development environments.
- Design network topology for enterprise applications.
- Identify problems uncovered by testing and customer feedback, and correct problems or refer problems to appropriate personnel for correction.
- Maintain all versions of the code using Visual SourceSafe.
- Handling IIS application environment in development and QA environment.
- FDA 21 CFR PART II Cheminformatics regulation application certification.

Here is 3 examples from more than 60 designed systems

System1: Corporate Chemistry portal (19 subsystems, around 800 forms and 300 objects) for 400 users.

- Oracle 11g2-RAC with ODP.NET pooled connection (300 tables and materialized views). Package-based data access layer (50 packages). Custom web sessions processing for web farm.
- ASP.NET application server (visualization libraries with more than 80 User / Web Controls).
- Server-side DLL-based business rules storage, processing and visualization libraries. Client-side JavaScript processing with AJAX-communication, interface and common objects library. Client-side ActiveX chemistry objects.
- XML-based ADO.NET data caching for read only information (for multiple data sources merge and filtering).
- Custom interface for CAP chemistry database (by ACELRYS) and JDE ordering backend system.
- Convert web applications to non-postback entry data transfer using WCF to save on amount of JavaScript coding, minimize postback data amount and extend Visual Studio debugging capabilities into client-side scripts.

System2: Biology tests registration and compound requests staging.

- PL-SQL Object Type-based data access. Oracle 8i with OO4O custom pooled connection (20 tables).
- ASP.NET application server (visualization libraries, OO4O's COM-objects instantiation).
- Server-side DLL-based business rules storage, processing and visualization libraries. Client-side JavaScript processing, interface and common objects library.
- Web services for shared lab equipment.

System3: Chemistry storage registration and sample replication.

- XML-based ORM objects storage, Oracle10i with ODP.NET pooled connection (60 tables, 500000 transactions per request).
- ASP.NET application server (visualization libraries, ORM abstraction layer using C#, multithreaded long-run processes, web services for the intersystem communication).
- Web interface for heavy loaded graphic tabular data simultaneous processing (320 objects).
- MVC-based application flowchart using open source library Maverick.Net.
- Server-side DLL-based business rules storage, processing, visualization libraries, EXCEL-spreadsheet's generation. Client-side JavaScript processing, interface and common objects library. Client-side EXCEL-based communication with the CALIPER and TECAN replication equipments.

Senior software engineer/ Software architect

ATX Telecommunications Inc - King of Prussia, PA - 2004 to 2004

Technical management for the 4 development teams out of 26 developers. Analysis, estimation, planning and assignment for the corporate software projects. Structural and functional model design (UML, ER-diagrams) for the Object/Database models.

◆Code design, technical writing and maintenance for the corporate INTRANET systems:

- J2EE (EJB/JSP/JavaBeans/JSP-Tags) development for the enterprise web/file processing cluster. Design objects for corporate Java library JAR-repository. Provide development for custom XML-based data repository analysis using JavaBeans. Hibernate-based Object/Database API-bridge for Java corporate development.

- SOAP bridge design for the application servers cluster connectivity.
- Provided migration from ASP-based to ASP.NET applications and web design (DHTML, JavaScript, XML/XSLT). Designed C# libraries design for application migration to .NET Framework
- Developed various Server-Side maintenance SHELL scripts for LINUX/UNIX environment.
- Designed business logic objects (packages stored procedures, triggers) for Oracle, INFORMIX, SQL Server, SQL Server-CE based systems (PL-SQL, TSQL).
- Maintained SQL Server, MySQL RDBMS, SourceSafe system, JSP/ASP OOP development/test/production environments, application installation procedures for more than 60 systems/applications.

Technical leader/ Senior Software Engineer

ATX Telecommunications Inc - King of Prussia, PA - 2001 to 2004

Provided management and technical writing for the development team (8 members).

- ◆Designed JSP/JavaBeans/JavaScript/XML-libraries for the customer's billimage processing system running under Windows/ JRun and UNIX/ Nestcape Server environments. Developed JavaBeans for business rules implementation.
- ◆Provided development and maintenance for CGI-based UNIX web applications..
- ◆Participated in design and analysis of various applications and reporting tools.
- ◆Designed Winsock-based Multi-Form Client/Server software for the ALCATEL switch accounts management VB-6.0, MS Access-7.0 and INFORMIX.
- ◆Developed WEB reporting tool design using HTML, VbScript, ADO, ActiveX and ASP.

Software trainer

Computer Source Consulting - Cherry Hill, NJ - 2003 to 2003

Provided training for:

- ◆Java, Visual Basic 5.0 / 6.0 as OOP programming languages for enterprise.
- ◆Oracle 7.3/ 8 as database management system. PL/SQL programming language.
- ◆Microsoft SQL Server as database management system. Transact SQL programming language.
- ◆COM objects design using ActiveX.
- ◆Three and two tiers Client / Server application design. Database engines implementation.
- ◆Internet application design using VbScript, JavaScript, DHTML and ASP.

Senior Software Engineer

ATX Telecommunications Inc - King of Prussia, PA - 2000 to 2001

for the application interfaces development. Implements XML-based MDI/screens/elements/fields/data source (EJB/JDBC/FileSystem/SOAP) definition language.

System2: Corporate customer's portal www.atxinsight.com (around 2000 forms and 100 objects).

- INFORMIX RDBMS with XML-configured concurrent JDBC connections (more than 1000 tables).
- Apache-2.0/Tomcat-4.29 4 web servers and 2 file processing servers cluster with SOAP-based custom API.
- Server-side JSP/EJB-based business rules storage, processing and visualization libraries. Client-side JavaScript processing, interface and common objects library. Client-side Java applets.

System3: Business analysis, production operations and billing support INTRANET web portal (250 forms).

- INFORMIX RDBMS with ODBC connection (200 tables).
- IIS-5.0 web server with NET Framework.
- Server-side ASP-based processing and visualization custom framework libraries. Client-side JavaScript processing, interface and common objects library. Client-side Java applets.
- Common usage objects based off ActiveX DLL deployed in MTS for Telnet, FTP, Winsock, compressing, document conversions, communication with Netscape Enterprise Server.

System4: Sales staff management system (70 forms).

- SQL Server RDBMS with ODBC connection (40 tables). Triggers, views and stored procedures.

- IIS-5.0 web server with ADO-3.0.
- Application forms for sales and administrative interface based off ASP-pages.
- XML-format data communication with the corporate systems. Table forms and Reports based off XML, XSLT, JavaScript presentation and processing libraries.
- ActiveX DLL for image/data upload and download.

Software engineer

MEI Technologies - West Chester, PA - 2000 to 2000

Designed ActiveX custom controls for export data from MS-SQL Server to HP-Unix databases.

◆Designed stored procedures and triggers for the SQL Server-6.5 based system to provide company movement toward Oracle oriented system. Create and maintain control software using VB-6.0 and ADO for the database connections and data manipulation for the above process.

◆Participated in design and analysis of various applications using VB-6.0 , MS SQL Server-6.5 and reporting tools.

◆Designed Multi-Form Client/Server software, database structure and data manipulation queries for the company products local audit data collection using VB-6.0, DAO and MS Access-7.0.

◆MEI production statistics collection software design using VB-6.0 and ADO.

◆Designed stored procedures and triggers for the production control data collection RDBMS based on Oracle.

◆Designed Oracle packages for the production database data integrity control team support using PL/SQL.

◆Developed and maintenance of the ActiveX-EXE servers for the company instrumental interface support.

◆Production reporting tool design using HTML, VbScript, ADO and ASP.

◆Developed interrupt firmware routines for the instrumental custom serial interfacing using Assembler.

◆Realtime image processing algorithms and firmware design using C and Assembler.

◆Gaming interfaces firmware design using C and Assembler.

◆Provided software version control support in team using PVCS-5.3/6.0. Build PVCS make scripts.

◆Consulted with users to define their needs and explain the systems features. Conduct system and product specifications documentation.

Software engineer

Accu-Sort Systems, Inc - Telford, PA - 1996 to 1999

Designed view, stored procedures, triggers and database structure for the company firmware products shipment and production control system based on SQL Server-6.5. User interface design for the database connections and data manipulation using VB-5.0 and RDO.

◆Designed interface, structure and queries for the local access databases using MS Access, VB-5.0 and Crystal Report.

◆Designed RDO and ODBC API access ActiveX custom controls and classes for the team project support.

◆Designed instrumental system utilities for the company systems field adjustment using VB-5.0.

◆Customized software for the PC-based conveyor control systems using TurboC.

◆Developed interrupt routines for the embedded systems synchronization with real time processes.

◆Designed real time optical recognition algorithms and firmware for the barcode scanners and object detectors based on RISC processors ADSP-2105 and MIPS-3000 with Assembler and C language.

◆Conducted personnel training for the Visual Basic, SQL Server-6.0 and RISC processors firmware application design.

◆Provided documentation and customer support for the company software products.

Software engineer

"IKKO" Engineering Company - Львов - 1993 to 1996

Team leader of two programmers and three electronics engineers.

- ◆Participated in design and coding of various size and nature applications using Visual Basic and MS Access.
- ◆Developed optical recognition and video filtering software for the INTEL 8086 based system.
- ◆Designed software for the teaching system network file server using Turbo Pascal.
- ◆Designed firmware for the thermo-control technology equipment using Z80 Assembler.
- ◆Designed software and hardware for the IBM-PC ISA-interface technological periphery.

Scientific researcher

"ELVIT" Defense Scientific Research Center - Львов - 1988 to 1993

Designed mobile measurement and conveyor data processing systems for spectrum analysis.

- ◆Created software and hardware for the mainframe input/output channel microprocessor equipment.
- ◆Designed hardware and software for IBM - PC prototype computer control system.
- ◆Designed analog input devices and software for the audio band spectrum analyzers.
- ◆Developed software using Assembler, C and Pascal languages for IBM/PC and PDP-11 computers.

EDUCATION

Keystone University

December 2002

design

CSC Institute - Southampton, PA

December 1999

project management

Learning Tree - West Chester, PA

October 1999

MS in Computer Science

State Lvov Technical University - Львов

1983 to 1988

ADDITIONAL INFORMATION

Professional Skills

Operating Systems: LINUX, UNIX, Windows [...] ISIS-II, CP/M, MS-DOS

Programming Languages

C#, Java, C, LINQ, C++, VisualBasic-6.0/.Net/CE, VBScript-5.0, JavaScript, Assembler, PL/M, C, Pascal, Korn Shell, Keil C51/ASM51, MASM-x86, C, HTML, XML, XSLT, ASP/ ASP.NET, JSP, SOAP, SOAP-RPC, CSS

Programming Technologies:

J2EE(EJB, JavaBeans, JSP, Servlets), JNI, Struts, JAXP, FOP, POI, ANT/NANT, JFC (Swing), WEB Services, WebAPI, XML, ActiveX, OLE, MS MTS, Windows API, HTML-DOM, WinSock, Apache-SOAP

Programming Tools:

JBuilder-10, Forte, [...] Visual Studio-6.0, Embedded Visual Basic, XML Spy, Altova XSLT Designer, Eclipse, DreamWeaver-7.0

Middleware:

Reporting Services for SQL Server 2008, SharePoint 2007(MOSS SDK), IIS-6.0/7.0 (ASP.NET [...] /ASP), Jboss-3.2.3, Tomcat-4.1.30 (JSP/ Servlet), JDK-1.4, NET [...] 4.5, Windows CE, Hibernate/ Nhibernate, Log4Net, Accelrys-5.3 Chemistry Objects / Chemistry cartridge, AJAX, JQUERY, JSON, Maverick.Net, Magic AJAX, SharpPDF, GDI image library, IonicZIP, QuickBooks API library.

Databases:

[...] Informix-7.2, MS SQL Server-6.5/ 7.0/ 2000/ [...] MS Access, MySQL-4.01, SQL, Transact-SQL, PL/SQL, SQL Plus, ODBC,/JDBC, RDO, DAO, ADO,ADO.NET,ODP.NET(9.2, 11r2), OO4O

OOA/OD Methodologies/ Tools:

TOAD-9.6/10, Erwin-4.1, VisualUML-3.22, Argo UML, MS Visio, CVS, TFS, Subversion, JENKINS,Visual Source Safe, FORTIFY MS Front Page, Crystal Report-8.0, CorelDraw-9.0,PhotoShop, Seagull's Bartender-9.0, Jira, ServiceDesk, MS VisualStudio [...]

Hardware: Microprocessors: 8080, Z80, 80x86, 8048, 8051, ADSP-2105, [...] IBM PC 80x86