

BIOGRAPHY

- ❖ Over sixteen years of IT experience with more than ten years of technical leadership.
- ❖ Roles: Architect, Project Manager, Technical lead, Designer, Analyst, and Programmer.
- ❖ Technologies (Expert level): Distributed systems, Agile Development, Object Orientation, Internet/Intranet, Client/Server, RDBMS, Rule-Based/Metadata systems, Java/J2EE/JEE, XML/XSLT.

TECHNICAL EXPERIENCE

- ❖ **Platforms:** MS (DOS, Windows 9x, NT, 2000, XP), and Unix.

- ❖ **Software:**

- Java (9 Years), including:

JSP/Servlets/Custom Tags/Struts/EJB/JMS (6 Years)	Tomcat (6 Years)	BEA WebLogic (2 year)
Spring (2 Years)	Hibernate (2 Years)	Echo (6 Month)
Tapestry (6 Month)	JUnit (5 Years)	Ant (5 Years)
Web Services (2 Years)	AJAX (1 Year)	

- Microsoft's: VB.Net, C#, ASP.NET, ASP, Visual InterDev, Visual Basic, ActiveX, COM/DCOM/COM+, MTS, IIS, Win32 API, Visio, MS Project.
- Database: SQL, JDBC, ODBC, ADO.NET, MS-SQL Server, IBM DB2/UDB, MySQL, Oracle, and InterBase.
- Internet: XML/XSLT (5 Years), HTML (7 Years), DHTML/JavaScript (4 Years), HTTP (Created an HTTP server).
- Languages: Delphi (3 Years), C (5 Years), and C++ (3 Years), Ruby (6 Month).

- ❖ **Technologies:**

- Methods: Agile (XP) and Iterative. Test Driven Development (TDD). OO A/D/P. Used UML, OMT, and Shlaer-Mellor. Design Patterns. SOA.
- Distributed Systems: Multi-Tiered architectures, Client/Server, Internet/Intranet/e-Commerce applications.
- Rule Based/Metadata engines analysis, design, and implementation.
- Languages and Compiler analysis, design and implementation. Used Lex, Yacc, and Antlr.

PROFESSIONAL HISTORY

Pillar Technologies, Independent Contractor, Cincinnati Ohio, January 2008-Current

- ❖ **Tech Lead for an Automatic Characterization Test Generation at an Insurance Company:**
 - Created a system which generates characterization test (e.g. JUnit) cases for Java legacy systems.
 - The system records program's behavior at run time, and generates test cases based on recorded values.
 - The system helps bootstrapping the creation of test cases for legacy systems without test coverage.
 - Apply TDD and Speed-To-Value (S2V) in system design and implementation.
 - Technologies include: AspectJ, JBoss AOP, JUnit, EasyMock, JMock, Service Provider Interface (SPI), and Reflection API.
- ❖ **JEE Architecture and Team Lead at a Services Company:**
 - Fine tune application performance and database operations.
 - Apply TDD and Speed-To-Value (S2V) in system design and implementation.
 - Introduced new ideas in inter-system interactions that saved more than 50% in effort and budget.
 - Created applications that monitor systems health.
 - Technologies include: Spring, Hibernate, JUnit, Quartz, Spring MVC, FindBug, Ant, and Oracle DB.

Cardinal Solutions, Managing Consultant, Cincinnati, Ohio, September 2006-January 2008

- ❖ **JEE Enterprise Architecture Performance Tuning And Enhancements For an Insurance Company:**
 - Profile and determine bottlenecks in an enterprise web application.
 - Proposed and implemented performance enhancements.
 - Interact with management and business experts to optimize business rules.
 - Technologies include: Spring, Hibernate, JUnit, Tomcat, FindBug, and Oracle DB.
- ❖ **J2EE Enterprise Architecture For an Airline Company:**
 - Define, enhance, and optimize different enterprise services.

- Interact with applications programmers helping them to use enterprise services.
- Technologies include: EJB, Hibernate, JUnit, WebLogic 8.1, and Oracle DB.

Fusion Alliance, Consultant, Cincinnati, Ohio, March 2006-September 2006

❖ **Web Interface For a Car Leasing Company:**

- A Web interface for an Oracle Forms based App.
- Solution is Java based using Agile approach.
- Technologies include: Spring, Hibernate, Tapestry, JUnit, Quartz, Tomcat, and Oracle DB.

Relizon, Master Developer, Dayton, Ohio, March 2004-March 2006

Led and implemented several IT projects for the company's e-business system. Some of them are:

❖ **System Performance Enhancements:**

- The e-business system is a J2EE application running on Unix, Oracle 8.1, and BEA WebLogic 6.1.
- It had some reliability, performance, and quality issues.
- Worked on identifying its problems and suggesting ways to improve it. Found common anti-patterns, performance bottlenecks, and bugs. Some of the found and corrected problems include EJB abuse, bad choices for XML processing, JSPs with large amounts of Java code, slow SQL queries, redundant object creation, improper exception handling, and inaccurate logging.
- Created documents for best practices, and how-tos.

❖ **EAI Rewrite:**

- The e-business software interacts with other legacy and external systems through EAI software (Vitria and WebMethods).
- The interface with EAI was not reliable, crashed often, wasted a lot of computing resources, and was hard to maintain.
- Redesigned and led the implementation of a new system that is:
 - Very reliable: The system never crashed. When we had hardware crashes, we were able to restart the system reliably.
 - Light weight: We were able to move the new EAI system from a dedicated server to a shared server.
 - High performance: On average we achieved more than 10x performance gains, with some transactions being more than 100 times faster.
 - Clean and intuitive design and code: We followed an iterative method, and a consistent design and code review process. We were able to detect and correct design flaws and bugs in the early stages. By the time the system was deployed for customers testing, only two minor issues were raised.
 - Inexpensive: With a team of 2 to 4, we were able to produce the system within a fraction of the original system's time and cost.
- The system is a J2EE application, running on: Solaris Unix, Oracle 8.1, BEA WebLogic 6.1.
- Technologies: Java, SQL, EJB, JMS, BEA WebLogic, ORM, JUnit, Web Services, XML, SAX, DOM, Java Mail API.

Sogeti (Formerly Cap Gemini Ernst & Young), Principal Consultant, Dayton, Ohio, 1994-March 2004

As a principal consultant, participated in many projects at different clients, the following are **some** of them:

❖ **J2EE Application Refactoring And Optimization:**

- Enhanced the interface with legacy application through JMS.
- Organized system with different design patterns: Singleton, Factory, Adapter, Façade, Proxy, ...
- Wrote programs to inspect and detect possible problems with Java code.

❖ **Neural Network System:** Designed and implemented a Neural Network system to help in business's decision-making.

- Created Neural Network backend engine supporting Back Propagation.
- Created a dynamic front end where users can easily configure the network (e.g. layers, learning rate).
- Network can be trained on any business domain. Used for credit approval, and pricing.
- Implemented using VB.Net.

❖ **Lotus Notes to Java/J2EE Conversion:** Technical lead (Team of 4) and architect. Led a transition from a Lotus Notes to a Java/J2EE environment at a major insurance company.

- Introduced and mentored staff in learning Object orientation, design patterns, Java, JSP, Custom Tags, Struts/MVC, EJB, JavaDoc, JDBC, JBuilder, JavaScript, HTML/DHTML, relational databases, DB2/UDB, and SQL.
- Defined a framework for quick development of client's applications.

- Created the core libraries of the framework for database object encapsulation and pooling, collection management, and string processing.
- Defined architecture for integration with LDAP, user logon and authentication.
- Reviewed design, code and documentation.
- ❖ **E-Commerce Web-Site:** Project manager (Team of 4), Architect, and technical lead. Created a site for art sales, where artists can display and sell their work.
 - Multi-tiered, fully object oriented system.
 - Support for detailed criteria search, customer voting and feedback, and artist grading by customers.
 - Technologies: Java 2, Servlets, JSP, Struts, Custom Tags, EJB, Java Mail API, JavaBeans, Tomcat, JBoss, JavaDoc, JDBC, XML, XSLT, MySQL, JBuilder, HTML, and JavaScript.
- ❖ **Web Real Time Reporting:** Technical lead (Team of 5), Architect, Designer, and Programmer. Defined and executed project plan. Created a system that reports (in real time) on events occurring in a manufacturing plant to users on the Intranet.
 - Multi-tiered, Distributed, Intranet application.
 - Created a Java server application that is scalable and fault-tolerant.
 - Designed the integration architecture with MS COM/MTS based systems.
 - Technologies: UML, Java 2, Java Mail API, JDBC, JSP, Servlets (with Tomcat and JRun), JavaBeans, Applets, JavaDoc, XML/DOM/SAX, , TCP/IP, UDP, Multicast, Multi Threading, MTS, ASP, and IBM UDB.
- ❖ **Car Dealership Communication System:** Technical lead (Team of 6), Architect, Designer, and Programmer. Defined and executed project plan. Created a rule-based, metadata-driven communication system with these characteristics:
 - Multi-tiered, thin-client, Intranet application.
 - Designed and implemented an XML compliant language to define the business rules.
 - Technologies: UML, VB 6.0, XML, ASP, MTS 2.0, IIS 4.0, ADO 2.0, MS-SQL 7.0, HTML/DHTML, COM/DCOM/ActiveX, and Visual InterDev 6.0.
- ❖ **Insurance Rating Engine:** Technical lead (Team of 4), Architect, Designer, and Programmer. Created a rule-based (procedural rules, forward chaining) Rating Engine to help an insurance company define and produce quotes. Using the rule-based approach saved 75% of the time/cost over using traditional methods. The system has these characteristics:
 - Multi-tiered, object oriented, client-server application.
 - Allows business experts to express business rules using a specially created language that is easy and English-like.
 - Created a “compiler” to interpret and execute the business rules.
 - Technologies: Delphi 2.0, InterBase, Win32 API, and COM.
- ❖ **Customer Satisfaction Measures System:** Designer and Programmer. The system automates sending surveys to customers and reports on their satisfaction.
 - My role included database and screens design and programming.
 - Technologies: Unix, C, OMT, C-Shell Scripts, and SQL.
- ❖ **Other Smaller Projects:** (Duration < 6 Months) Used the following:
 - Languages: Java, C#, VB.Net, ASP.Net, Delphi, Turbo C, VC++, AWK, SED, and Korn-Shell Scripts.
 - Systems: HP-UX System Administration, and Oracle 7.0.
 - Technologies: SMTP, MAPI, ODBC, HTTP, Lex & Yacc.

Wright State University, Graduate Assistant, Dayton, Ohio, 1990-1993

As a graduate assistant, in the office of Affirmative Actions, created software to automate the office’s business. Created software included:

- ❖ Program to monitor job opening history and applicants statistics.
- ❖ Program to monitor employment trends and their correlation with employees’ background.
- ❖ Different statistical programs to monitor and verify compliance with law.
- ❖ Technologies: MS-DOS, Clipper, FoxBASE, C, and Assembler.

Arboon Commercial Information Center, Engineer, Riyadh, Saudi Arabia, 1988-1990

As a staff software engineer, designed and implemented custom and shrink-wrap business applications including:

- ❖ Accounting package, Real estate management, Car rental agency management, and School administration management.
- ❖ Technologies: MS-DOS, Clipper, C, Turbo Pascal, Modula-2, and Assembler.

EDUCATION / CERTIFICATION

- ❖ Sun Certified Programmer for the Java 2 Platform, 1999.
- ❖ M.S. in Computer Engineering. 1994. Wright State University, Dayton, OH
- ❖ B.S. in Computer Engineering. 1988. King Saud University, Riyadh, Saudi Arabia.