# Pankaj Kumar

[pankaj\_kc@hotmail.com](mailto:pankaj_kc@hotmail.com)

651-675-6788

## **Summary**

I am a passionate technologist with over 18 years of software development experience in roles as an Architect, Team Lead, and Developer. I have a wide breadth of knowledge of both current and emerging technologies allowing me to identify innovative technical solutions for customer needs. My strengths are my diversity and depth of experience, perseverance, ability to learn new technologies quickly, and organizational skills.

My main areas of interest include application architecture, data architecture as well as technical architecture both backend and frontend Ruby on Rails, JavaScript toolkits including JQuery, JSON, MongoDB (no-sql), Hadoop, lightweight framework, Open Social, RESTful and SOAP Architecture, Web application performance, Security, OAuth, OpenID, SAML, Agile development practices and methodologies and Test Driven Development.

* 18+ years of IT experience with expertise in bringing products from concept to launch in a variety of environments.
* Solid experience as an Architect, Team Lead, Mentoring experience and record of success in making projects work using the skills of existing staff.
* Familiar with **TOGAF** architecture framework. Currently pursuing **TOGAF** certification.
* Strong business and technical skills that enabling engagement with cross functional teams.
* Ability to translate a department's business functions and requirements into terms that are meaningful to software developers.
* Fast Learner, good team lead and player, enjoys working under pressure and tight schedules.

## **Objective**

My main objective is to work in an environment that pushes the limits of my abilities and provides me the opportunities to gain the respect of my peers. Ideal position will be that which gives me the responsibility and freedom to use my experience, skills and creativity to craft innovative open architecture solutions to the problem today and tomorrow.

# Professional Experience

## **Wells Fargo (Architect/Designer) Oct 2013 – Current**

**Capital Market Credit Risk**

**Minneapolis, MN**

### **Project 1:**

Involved in setting up Enterprise Architect (EA) 10.x with TOGAF Ad-In as a shared architect repository to be used to store architecture and project artifacts, for example, conceptual models, use case, design patterns, reference model, business architecture, business scenarios and other building blocks.

Designed a governance process, templates and governance polices for adding any artifacts (architecture pattern, design patterns or any other building blocks ) in the shareable architecture repository.

### **Project 2:**

A web application to create a questionnaire or a form; questionnaire with hierarchal section structure and section has a hierarchical questions structure. Each question can have an answer option (radio buttons, dropdowns, check boxes or a text box, group of text boxes. Each question can have behavioral constraint and/or severity constraint. Questionnaire is rendered on the web, printed as PDF, deliver to other applications through web services.  Incomplete submission checks, partial submission.. Once submitted ability to review, add comments on each question and escalate; filter questions based on severity level of the answer, or review status. Aim was to create reusable forms to certify correspondent lenders and later to be served to client facing applications through web services.

**Non-functional requirement:** Auditability, usability, **reusability**, integrity

**My Role:**

Architected and created high level design and detail design

* Produced technical feasibility by proof of concept, covering all non-functional requirements
* Created System Architecture Document (Component Diagrams), Functional Specification Document
* Provided inputs to the data-model
* Created requirement based use-cases and test strategies.
* Established solution frame-work considering layered architecture and right design patterns focusing on key architectural objectives of open-closed, decoupled, reusable and extendable solution.
* Created Technology Roadmap for applications upgrade

**Technologies Used:** Enterprise Architecture, Visio, Spring Security, Oracle, SOAP/REST, Spring, MVC, HTML, CSS3, JQuery, AJAX, Bootstrap, Spring Security, MQ, Axis-2, Xml/XSD, Oracle.

### **Project 3:**

Capital Market Eligibility Decision System: Replacing existing legacy system rules/decisions/business logic in the database with new application using Drools based rule engine, DECISION from Sapiens.

A batch process that runs every night with loans determines salability of each loan. A web UI to i) executing/simulating one or more loans against rule engine, ii) Initiating a batch process iii) Compare results iv) Error reporting v) Payload and response search using Lucene.

**Non-functional requirement:** Auditability, rollback, scalability, performance, reliability, vendor software SLA, availability, reusability, robustness and efficiency.

**My Role:**

* Was responsible for performance, monitoring and robustness
* Created performance and load test strategies
* Led the performance tuning of the batch and web application
* Configured tomcat (concurrent threads, stackSize for each thread, HeapSize, permSize, # of JVMs on each server, JVM tuning, multi-threaded design
* POC on testing with different server configurations.
* POC testing the performance and storage requirements of Lucene based payload search solution
* Involved with DBA in database tuning (query tuning, table partitioning, buffers)

**Technologies Used:** CAIntroscope 8.x**,** Sapiens Drools based rule engine, MQ, Java, Spring, AJAX, SOAP and REST, MVC, HTML5, CSS3, Spring Security, YIU, JQuery, Oracle, MS Project, Enterprise Architecture.

## **Prime Therapeutics Nov 2012 – Oct 2013**

**Guided Health**

**Eagan MN**

The Guided Health platform help physicians, members and health plans identify opportunities for better management of pharmacy utilization, gaps in care, safety and costs, resulting in improved patient outcomes and overall health. It is a batch process which work on all claims (medical and pharmacy) of the members on Corticon, which is a rule engine.

**My Role:**

My role was in improving the performance of the whole application. Batch process in each run varies from hundred thousand members/claims to millions and run time was up to 24 hrs sometime. I was involved in re-architecting, re-designing, refactoring to make it an open, and scalable robust, efficient and high performance application.

* Identifying bottle neck and do POCs and comparison and evaluation.
* Upgrading from Axis 1.4 to Axis 2.0 on Corticon server.
* POC on changing SOAP to Rest call and comparing performance with production data.
* POC on loading Corticon in memory instead of loading Corticon on a separate a server as a web service comparing performance with production data.
* Created load and performance test plan
* Involved in new architect event driven system an alternate of batch process, Did POC on it and comparing effectiveness and performance with production data.
* Created server **ant** and python script to auto-deploy ear to WAS server.
* Created ant scripts to run unit tests, integration tests and functional tests and send an email on success or failure.

**Skills Used:** Visio, Java, J2EE, Spring IOC, JMS, MQ Series, Restful Web Services, DB2, Ant 1.7.4, Maven 3.0.5, STS 3.6, Jira 6.0, Axis-1.x, 2.x, Confluence 5.1.3, Crucible 3.0, Fisheye, IBM RAD 8.0.4, WAS 7.5

## **Cigna June 2012 – Nov 2012**

**Team Lead**

**Minneapolis MN**

C.O.D.E. Runner is an end-to-end clinical infrastructure project designed to support and addresses holistic health management capabilities. This is an integrated customer-centric care platform provides advanced clinical analytics, workflows and communications channel.

Lead a team of 6 developers. I was responsible for implementing ‘Auto Assignment’ functionality in the CODE Runner in both Desktop and Batch Module.

**My Role:**

* + Gathering functional requirements from business.
  + Collaborating and finalizing design.
  + Design reviews along with Enterprise Architects
  + Either created or making sure to have Wiki for each story.
  + 80% of the time was involved in development using technologies mentioned below.
  + Technologies actively used Spring MVC, Batch, Mockito, Ehcache, Oracle, Maven, and Jenkin.

**Skills Used:** Java, J2EE, JSP, JUnit, Mockito, Eclemma, iBatis 3.1, Spring IOC, AOP, MQ JMS, EhCache, Oracle 11g, Drools, jBPM, JSTL, Flex , MVP, Maven, STS 3.6, Rally for Agile Stories and tasks.

## **Carlson Wagonlit Technologies Feb 2012 – June 2012**

**Java Architect**

**Minneapolis MN**

Re-architecting existing legacy application from DOS, C, .Net to Java, Drools, JBPM. This is a backend high transaction volume application. **Carlson Wagonlit Technologies** (CWT) travel agents all around the world feed this system through Global Distribution System (GDS) Sabre, Travel Port (Galileo, Apollo) and Amadeus). Design and development of various modules of that involves JMS, Spring, Junit etc using a Test-Driven Development (TDD) approach. Development methodology used was the Agile methodology with Rally. Process included iterative development, 3-week sprints, and daily stand-up 15 minutes meetings.

**My Role:**

* + Working with Enterprise Architect to analyze so that it fits in the Enterprise System Architecture framework
  + Created high level design and detail design
  + POC feasibility of open source Drools to capture Identify potential bottlenecks
  + Created conceptual Model, component model
  + Created technical specifications document
  + Reviewed along with Enterprise Architect
  + Main emphasis is on performance and vertical and horizontal scalability.
  + Making sure PCI Compliant along with Enterprise policy
  + Helped in setting up of development environment, that includes Weblogic Server, Oracle database, Hudson for Continuous Integration, SVN for version control, and Nexus for maven repositories.
  + Working with Project manager in release planning and prioritizing stories.
  + Coordinating between Team Leads, QA, IT Ops and other teams,

**Skills Used:** Java, J2EE, JSP, JUnit, Eclemma, Hibernate 3.1, Spring IOC, AOP, MQ JMS, distributed EhCache, Oracle 11g, Oracle AQ, Drools, jBPM, JSTL, Spring tags, GWT, MVP, Maven, STS 3.6, Rally for Agile Stories and tasks.

**McKesson Technology Solutions Sept 2011 – Feb 2012**

**Minneapolis MN**

Integration of two applications; ‘Horizon Quality Monitor (HQM)’ and ‘Horizon Enterprise Visibility(HEV)’. Designed and development of various modules of that involves JMS, Web Services, Spring, Junit etc using a Test-Driven Development (TDD) approach.

**My Role:**

* + Analyzed exiting product and designed solution for integrations.
  + Gathering and identify the requirements and propose the solution.
  + Designed, developed and documented technical specifications.
  + Based on requirement finalize the schema. Finalize queries using hibernate to fetch the data needed to converted to XML and sent to queue.
  + Support pages using Spring controllers, tags and JSTL for sending to queue based on various criteria.
  + Introduced JMock for the testing and for coverage Eclemma

**Skills Used:** Java, J2EE, JSP, JUnit, Eclemma, Hibernate 3.1, Spring IOC, AOP, MQ JMS, Oracle 11g, Oracle AQ, JSTL, Spring tags, GWT, MVP, Maven, STS 3.6, StarTeam, Groovy, Rally.

## **Royal Bank of Canada April 2011 – Sept. 2011**

**Application Architect**

**Minneapolis MN**

Responsible for two main projects:

Designed and architecture new project; documenting the technical details including UML and use cases. Setup a process and guidelines to be followed by local and outsourced developers. That included setting up framework and environment.

1. Annuity and Insurance (AANDI)
   * PowerBuilder internal application a rule-based record keeping system for tracking the processing, transfer and commission regulations of Annuity transaction.
   * Identified right technologies from the existing available choices and enterprise polices
   * Created Software Architecture Document showing the description of software architecture, including major software components and their integration.
   * Designed n-layer interacting with mainframe, JMS, two databases and external clients.
   * Created a working prototype with following technologies Spring, Spring Security, MVC, AOP, Hibernate, Spring-REST, XML-Beans, MQ JMS, WebSphere Application Server (WAS 7.0), MS-SQL Server 2008, AJAX, JSTL, Spring tags, JQuery.
2. Reorganization One and Done (ROAD)

* Upgrading from Java 1.4 to Java 1.6.
* Moving from WAS 6.0 to WAS 7.5

**Skills Used:** Java, J2EE, JSP, JUNIT, Hibernate 3.1, Spring IOC, AOP, MQ JMS, DB2, MSSQL Server WAS 7.0, RSA, SOAP and REST Web Services, Axis-2 , AJAX, JSTL, Spring tags, JQuery , Eclipse 3.6, CVS, SVN.

## **Wells Fargo WMG Oct 2009 – April 2011**

**Sr. Application Developer**

**Minneapolis MN**

Working on an Enterprise Bus Services, it is a service-oriented integration platform. It is an interface to client applications, insulating the impact of technical and enterprise changes. The Bus service integration platform created to; create a set of reusable services for WMG applications with consistent interfaces to simplify development; Aggregate data from multiple provider systems. Approximately 25 client systems are relying upon 200 Bus services to interface with 18 provider systems approx. 300,000 times per day resulting in approx. Two to three million-provider system calls.

I led the design and development of various web services using a Test-Driven Development (TDD) approach. Development methodology used was the SCRUM Agile methodology. Process included iterative development, 2-week sprints, and daily stand-up meetings, and customer managed backlog.

**My Role:**

* Participated in story jams, business requirements and design discussions.
* Designed and developed web services using SOAP, Axis, xml-beans.
* Involved in schema design and schema reviews.
* AGILE methodology with around 30 to 40 developers.
* Developed Mock Object tests, Integration tests (Meddler).
* Regular code peer review and business review

**Skills Used:** Agile, Scrum, Java, J2EE, EJB 3, JSP, JUNIT, Hibernate 3.1, Spring IOC, AOP, MVC, Oracle 10g, WebLogic 9.2, Tangosol/Oracle Coherence, JAX-WS SOAP WebServices, Axis-2, Ivy, ECLEmma, CheckStyle, FindBugs, Confluence Enterprise Wiki, Crucible, CVS, SVN (Tortoise)

## **Comcast, Mt. Laurel, NJ July 2009 – Oct 2009**

**Sr. Application Consultant**

**Workbench Application**

This is J2EE application, which assists the Comcast agents to create a lead for a given opportunity and then complete the work process to convert the opportunity to a contract.

**Responsibilities:**

* Architecture and designing of the application using Spring-DWR, Struts, AJAX, SOAP web services.
* Involved in both front end (Spring-DWR, Velocity Templates, Trimpath) and backend.
* Agile methodology, with four weeks iteration, having two stand-ups morning and evening.
* Developed business layer and presentation showing Scheduled Time and Slot for customer installation of the Comcast products.
* Design of Cellback Haul task pages, used by sales person to convert opportunity to tasks. Accept Service Order to final contract. (24 tasks).

**Skills Used:** Weblogic 10.0, Eclipse, CVS, Java, J2EE, JSP, JUNIT, Anthill, Hibernate 3.1, Spring IOC, Spring DWR, AJAX, Swing, applet, JavaScript, Taglibs, Portlets, Oracle 10g, Aqualogic BPM.

## **US Bank, MN Sept. 2005 – June 2009**

**Team Lead**

### **Multi Service Aviation WEBPOS (MSA-WEBPOS):** Worked on MSA-WEBPOS Credit Card for charted planes Point of Sale (POS) Application. This application is used by different merchants of acquirers (AvFuel, Chevron, Western Petroleum) at “Point of Sale” for sale of gas and other products to charted planes. Maintain the tax and reward points based on business rules set by acquirer.

**My Role:**

* Collaborating with Business analyst and various teams involved
* Migrating whole project and team from WebSphere Application Server(WAS) 5.1 to and WebSphere Application Server(WAS) 6.1 and GUI from RAD 6.0 to RAD 7.1 and from Java 1.4 to Java 1.5
* Web application profiling, using JProbe.
* Login/logout/forget password, security questions module integration with WebGate/NetPoint.
* Receipt generation/printing with iText.

**Result:** Other than successful migration, successfully implemented new enhancements, new features (Receipt printing as PDF) and transition from WAS 6.0 to WAS 6.1.

**Skills Used:** WebSphere Application Server (WAS 6.1), RAD 7.1, Rational Rose, SVN, Active Directory, Jasper Reports, iText, J2EE, EJB 3.0, JSP, JUNIT, XML, DOM, XSD, MQ, Hibernate 3.1, Spring, Oracle 9i.

### **VOYAGER Fleet Systems:** Senior team member of the award winning Voyager Fleet Card. More than just a fuel card, Voyager® Fleet Card provides an array of fuel, maintenance and service solutions that greatly simplify fleet management.

**My Role:**

* Architect/Design of Gas Station locator module, where Voyager Card is accepted, showing latest gas price. Used Microsoft MapPoint Web services (SOAP) to display location on the map.
* Mass card creation modules, where client can request more than one credit card (up to 99) for his fleet/drivers.

**Result:** Successfully implementation to production and edge over competitors & helped in winning contract.

**Skills Used:** Rational Application Developer (RAD 7.1), Rational Rose, Clear-Case, Java, Facelets, Hibernate 3.1, Agile Methodology, Spring, Oracle 10g, DB2, AJAX, XML, Microsoft MapPoint, SOAP Web-Services.

### **Access Online (AXOL):** Access Online (AXOL) is a web-based electronic program management tool that provides cardholders with quick access to their complete account information enabling individuals to view their account activity and billing statements.

**My Role:**

* Helped in new enhancements and code refactoring.
* Worked in TIBCO BW5 and Java to creating Web Services (REST) so that end user can submit new card creation/maintenance through their own website using our Web Service.

**Result:** Successfully implemented various enhancements and code improvements

**Skills Used:** WebSphere, Rational Rose, ClearCase, ClearQuest, J2EE, EJB, JSP, Servlet, Spring MVC, Hibernate 3.0, Taglibs, Oracle 9i, DB2, MS-SQL, DB2, TIBCO In Concert 6.2.1 and BW 5.4, WS-BPEL, JMS/EMS, Web Services, XML DOM, XSLT, XPATH, XQuery, XSD, XLINK, Sun Solaris Unix.

## **3M, MN Feb. 2001 – Sept. 2005**

**Architect/Team Lead**

**Multimedia Conferencing Service Web Services interface with Global Crossing**

Developed and designed interface with external vendor for passing on subscription information to vendor database using Web-Services. Automated subscription response on new request for subscription along with a way to handle subscription queries. Other than coding, was responsible for design, gathering and document requirements. Coordinating and implementing testing with external vendor.

**My Role:**

* Responsible for key design and architectural decisions in the "next generation" product, based on a highly-scalable, service-oriented framework, using Java, Web Services and Hibernate.
* Created System Architectural Document(SAD) and Functional Specification Document(FSD).
* Wrote portlet Applications using Rational Application Developer with Portlet Development Toolkit. These portlet rendered the content for our Business Unit's web site from a back-end Content Management System, Fatwire Content Server.
* Configure WebSphere Application Server (WAS 5.1) for application for all environments.
* Design used web services for subscription process and data cleanup on vendor end.
* Coordinated with Global Crossing Team during development, evaluating issues in API. Security & connection and testing from development to QA to Staging and production.

**Skills Used:** Java 1.3, J2EE, Struts 1.1, Web Services (SOAP), JSP, Servlets, Struts-Taglibs, Rational Rose, IBM Portlets, JSR 168, WSAD, Oracle 8, DB2, 3M Persistence framework, Unix.

**Cellular Service Website :**This project involved gathering project requirements from multiple stake holders, analyze context and write use cases. The main feature of this website that authorized end user can edit the web pages dynamically on the browser. Provide ability to process all kinds of work orders. (New cellular phone, replace existing phone, transfers to corporate account, add accessories, add or remove features and cancellations).

**My Role:**

* **Architect, designed application, testing prototype for design and evaluation.**
* Gathering user requirements, business use-cases based on the requirements.
* Involved in all phases of coding, development and testing.

**Skills Used:** Java 1.3, J2EE, Struts 1.1, Web-Sphere Studio Application Developer (WSAD), JSP, Servlets, Java, J2EE, Struts, Taglibs, XML, XSLT, DOM, MS-SQL, Oracle, DB2, 3M Persistence Framework, Rational Rose, HP Unix.

**Multimedia Conferencing Service:** A web based quick and easy way to manage conferencing database. Most of the information is displayed on the website. This database involves frequent edits, insert and deletes. This system allows the page author to login and change (edits/insert/deletes) the page contents via browser. Internal dynamically pages are cached is not generated again unless database has changed. Subscribe to Global Ready Access and transfer subscriber’s data outside to Global Crossing. Website menu structure, links, contents can be changed thru website.

**My Role Include:**

* Gathering user requirements, drafting business use-cases based on the requirements.
* Responsible for defining scope and preparing scope of work
* Architect, designed application, testing prototype for design and evaluation..
* Class diagrams, object-level use cases, communication/sequence.
* Involved in all phases of coding, development and testing till deployment to production

**Skills Used:** Java 1.3, J2EE, Struts 1.1, Weblogic 7.1, JSP, Servlets, Java, J2EE, Struts, Taglibs, XML, XSLT, DOM, MS-SQL, XSL-FO Rational Rose, HP Unix.

**CAVS (Client Access Viewing System) :** A web based **Active Directory** search engine. Search can be by user pin to check their account information or can be by a group name to find out who are the members of that group.

**My Role:**

Basic design logic, and development to repair connection problems to LDAP Active Directory

**Skills Used:** WebSphere Studio Application Developer, LDAP, JSP, Servlets, Java, J2EE, Struts, CVS.

## **EIDRepository API:** An API to connect to 3M HR database for frequently needed fixed and dynamic queries.

**My Role:**

* Gathering requirements, generated use cases/
* Designing, developing, testing and deploying.
* Java API (jar files) that various applications can use to fetch data from HR db.
* Later converted that API to a **Web service**

**Skills Used:** WebSphere Studio Application Developer, Java, J2EE and Web Service (SOAP).

## **3M, MN Feb. 1999 – Jan 2001**

**Technical Consultant**

**Telecommunication and Order Processing System**

**TOPPS** (**T**elecommunications **O**rder **P**rocessing & **P**rovisioning **S**ystem) application was designed to helps Telecommunication department manage the network infrastructure, equipment capacity and cable connectivity with much-improved client troubleshooting capabilities**.** Existing application was having lots of problems.

**My Role:**

* Gathering user requirements and making business use-cases for the entire application.
* Clean the database side for unwanted tables, store procedures and triggers etc
* Designed and developed phases to incorporate new changes and fixes without disrupting and changing the normal flow in the application.

**Skills Used:** Weblogic 7.1, Java, J2EE, JSP, Servlets, Java, Sybase, Lotus Notes, HP UNIX, PB.

## **Southwestern Bell, MO Aug. 1998 - Feb. 1999**

**Technical Consultant**

**Migration from SQL Server 6.5 databases to Oracle 7.3.3**

Migrated three MS-SQL databases into one Oracle database. Bulk copy program (bcp) was used to extract data from SQL Server to flat files. SQL\*Loaders direct path load and conventional path load for moving data into Oracle. I was involved with converting Store Procedure used for populating data windows and converting Triggers/Views/Indexes. Also converted a PB 4.0 application to PB 6.5.

**Skills Used:** Pentium, PB 6.5, Oracle 7.3 in Windows NT, Sun OS 5.5.1

## **Security Link, Ameritech, IL Mar 1998 - Aug. 1998**

**Technical Consultant**

**Duplication & Cancellation Detection Application:** Development of an urgent needed Application for duplication/cancellation detection. Written a number of Stored Procedures for locating the valid /invalid duplicate entry of customer in the complete database, i.e. to locate same customers, even if name & address written differently.

**My Role:**

* Redesigning app in Object Oriented way, recreating and returning PowerBuilder application
* Tuning SQL scripts and store procedures. Designing new Security Levels in the application.

**Skills Used:** Pentium, PB 5.0, Oracle 7.3 in Windows 95, DBDT

## **Punjabi University, India Oct. 1992 - Jan. 1998**

### **Lecturer**

As a Lecturer and was involved in teaching computer science subjects (Database, Computer Networks, Programming Languages etc.) to undergraduates and Graduates.

I was also responsible for few in university projects.

### **Library Information System:** A Simple Library Information System for issuing & return of library books and for keeping the stock of the departmental libraries. Software to use was Oracle and PowerBuilder.

**Skills Used:** Pentium, PB 5.0, Oracle 7.2 in Windows 95, DBDT

### **TIFF file interpretation for Result Processing**: This S/W was made in C++, its main function was to read the tiff files generated by Scanner and convert it into textual form and append to the final data file.

**Skills Used:** Windows 3.11, C++, HP ScanJet 4c with ADF & Oracle - PB 4.0.

### **On-Line Information Processing Software for Indian Science Congress (ISCA**): For on-line registration of delegates, reporting state-wise, subject-wise list of delegates, accommodation details & reservation.

**Skills Used:** Pentium Server and Oracle 7 & PowerBuilder 4.0.

## **Himachal Pradesh University, Lecturer, Simla Jan. 1991 - Sept. 1992**

As a Lecturer and was involved in teaching students of Master of Computer Science and gathering requirements and analysis/design of university library computerization.

## **Thapar Institute of Engineering & Technology, Patiala, India Oct. 1989 - Dec 1990**

**Programmer,**

Result Processing System**, Skills Used:** FoxPro, Windows 3.1

## **Christian Medical College & Hospital, India Jan 1989 - Sept 1989**

**Programmer,**

Computerization of the Pediatrics Department:Computerization of the Pediatrics Department of the Christian Medical College & Hospital, Ludhiana it includes In-Patients and out-Patients registration.

**Skills Used:** MS DOS, Fox-Pro, MS-WORD, and PowerPoint

## **Technical Skills**

|  |  |
| --- | --- |
| **Programming** | Java, J2EE, EJB 3.x, Servlets, Web Services, Struts, JSP/JSF, JDBC, XML, XSLT, XSD, XPATH, Swing, Log4j, Ant, AJAX, GWT, JQuery, JUnit, JMS, Python, Ruby on Rails, PHP, C, C++, C#,.VB.Net, |
| **Other APIs/ Frameworks** | Hibernate, Spring (MVC, AOP, WebFlow et. al.), Struts, Tiles, JMS, MQ, Cobertura, ANT, JMock, Mockito, JSF, TIBCO In-Concert, Business Works 5, Introscope, SOA, SOAP and RESTful Web Services (JAX-RS) |
| **Methodologies** | SDLC, Waterfall, AGILE, Scrum, TDD. |
| **RDBMS/Database Related** | Oracle 9i/10g/11, PL/SQL, DB2, SQL Express 2005, SQL, MySQL, Sybase, HQL, Couchbase, MongoDB, Hadoop, HBase, Hive. |
| **Web/Application Servers** | WebSphere Application Server,Tomcat , Jetty, WebLogic, JBoss AS, IIS, Apache Httpd. |
| **Development and Build Tools** | IBM RAD 7.1, WebLogic 11.x, JDeveloper, Eclipse, NetBeans, TIBCO, Dreamweaver, Oracle Apps , Lotus Notes, Ant, Maven, Gradle,Ivy, Hudson, Anthill. |
| **Object Oriented** | UML, Design Patterns, Use cases, RUP, Enterprise Architecture |
| **Version Control** | SVN, Git, IVY, CVS, PVCS, Rational Clearcase |
| **Web Technologies** | HTML5, DHTML, XML, XSLT, XPATH, Java Script, CSS3, JQuery Mobile, Angular JS, Backbone, Bootstrap. |

## **Education:**

* Master of Computer Application: Thapar Institute of Engineering & Technology (1989), Patiala, India.
* Bachelor of Sciences: Punjab University, Chandigarh, India
* **Project Management Professional** (PMP, # 306617), 2005.

## **Interests:**

* Toastmaster
* Volunteering in Allina Hospice
* Volunteering in Spiritual Meditation Centers
* Meditation, Yoga