

# Partha Pratim Sanyal

[partha.pratim.sanyal@gmail.com](mailto:partha.pratim.sanyal@gmail.com) | +1-713-306-1286 | 16636 N 58<sup>th</sup> St Apt 1106, Scottsdale AZ 85254, USA

## EXECUTIVE SUMMARY

- 7 years of software development experience designing, developing and deploying **client-server, web-based applications** using **Java**
- Hands-on experience with **technologies** like **Spring 3.0**
- Followed best practices using **software design patterns (MVC, Singleton, Strategy, Adapter, DAO, Servicelocator, Business Delegate)**
- Good foundation in software programming concepts of **OOPS** and **OOAD**
- Wrote test cases using **JUnit** and **prepared test cases document**.
- Used **Microsoft Visio** for implementing **UML** techniques for the project analysis and designing
- Experienced in deploying J2EE applications over servers like **Apache Tomcat 6.x, Oracle Applications Server and IBM WebSphere 8.0**.
- Expertise with IDEs like **RAD & Eclipse**
- Proven work experience using **J2EE concepts** like **Servlets, JSP & JDBC**
- Experience in building code using **Apache Maven**
- Used platform neutral markup using **XML** with **DOM** and **SAX** parsers
- **Experience in using and writing SQL & PLSQL Code using MySQL, Oracle & DB2**
- Used **log4j** for application logging and notification tracing mechanisms
- Source code version control using **Subversion, SVN, CVS**.
- Hands on experience in developing **REST & SOAP based Web Services**
- **Mentored** junior associates in use of best **coding practices, design strategies and design patterns**
- Domain knowledge of **Retail and Banking & Financial** industry.
- Handled direct interaction with client and shown excellent adaptability and communication skills.

## TECHNICAL SKILLS

LANGUAGES	Java, HTML, UML, XML, SQL, Javascript
FRAMEWORKS	Spring 3.0, Struts 1.3.5, JUnit
J2EE TECHNOLOGIES	Servlets, JSP, JDBC, AJAX
DESIGN PATTERNS	DAO, VO, MVC, Singleton, Strategy, Service Locator, Business Delegate, Adapter
RDBMS/ ODBMS	Oracle 8.0/9i/10g, MSAccess '97, MS-SQL server, MySQL, DB2
EDITOR/IDE	RAD, Eclipse ,JDeveloper
SERVERS	Apache Tomcat 6.x, Oracle Applications Server, IBM WebSphere 8.0
VERSION CONTROL	CVS, Subversion.
TOOLS	Cardiolog, CISCO UIS, Apache Maven, HP QC, HP QTP
OPERATING SYSTEMS	UNIX, Windows 7

## EDUCATION

University of Arizona, Tucson, Arizona	GPA 3.5/4.0	
<b>Master of Science, Management Information Systems</b>		August 2009 - December 2010
National Institute of Technology, Bhopal, India	GPA 3.98/4.0	
<b>Bachelor of Technology, Information Technology</b>		September 2001 - May 2005

## PROFESSIONAL EXPERIENCE

**Cognizant Technology Solutions, Phoenix, AZ    Technical Lead (Sr. Associate)**

Feb 2011 - Present

Working for **American Express**.

- Technical design, development, documentation, and implementation of **JAVA/J2EE components**.
- Interacted and wrote stored procedures in **DB2 database** using a java maintenance tool for manipulating and updating data.
- Demonstrated **good work load balance** between projects and **worked under pressure** to meet the deliverables.
- Build the code using **Apache Maven**.
- Deployed the code in **WebSphere Application Server 8.0**
- Hands on experience developing **REST & SOAP based JAVA Web Services** using **Spring Framework**.
- Contributing to development of project schedules by providing work/time estimates.
- Working with PMs to break down work effort and establish deliverables for projects.
- Providing technical leadership/mentoring other team members on **OO technology** and advanced programming topics.
- Providing assistance to the delivery team members with issues needing technical expertise or complex systems and/or programming knowledge.
- Working on multiple projects or work streams concurrently.
- Participating in all phases of the project lifecycle: analysis, design, development and release, with an emphasis of effort on early phases.
- Ensuring business requirements are correctly translated into functional requirements, design specifications & source code.
- Worked on integration of several web services inside the portfolio, with the different applications, having the need to consume them.
- Source Code version control is maintained using **Subversion**.
- Review and monitor the change management system for deploying various web services changes.
- Making several changes to existing web services in order to promote integration with other web components.
- Providing **test support** to various teams that consume the services in the current portfolio.

**Republic Services, Phoenix, AZ**

**Systems Analyst – Internship**

June 2010 - August 2010

### ***Correlation Analysis - Live Service Vs Self Service***

- Conducted several interviews and remote meetings during the requirements gathering phase.
- Gathered reports using **MS SQL Server** in order to analyze and understand the trends.
- Used **CardioLog reporting tool** to generate web reports and analyze the web metrics for the divisional websites.
- Identified visitor trends and customer groups by analyzing the page visit statistics of 100 divisional websites.
- Analyzed the IVR call flow statistics for 234 call centers, based on skill groups and wrap up codes.
- Using the **CISCO UIS reporting tool** for call center data, developed reports and correlated them with CardioLog data.
- Discovered correlations between web metrics and the calls routed to the Customer Service Representatives.
- Recommended addition/improvement of self service pages on the websites that could decrease call volumes.

**Oracle, Bangalore, India**

**Applications Engineer**

January 2007 – June 2009

### ***Oracle Applications Testing Suite & QTP Web Extensibility Solution for Oracle Automation Testing Team***

- Supervised and managed a team of seven interns; provided feedback and mentorship.
- Developed web extensibility plug-in using **Java, JavaScript and XML for Oracle's proprietary web objects in OAF**.
- Executed test scripts using **HP Quality Center and HP QuickTest Professional**.
- Ran test scripts for the Java components using **Oracle OpenScript**.
- Performed unit, integration & regression tests on the plug-in components for performance issues & quality assurance.
- Oracle OpenScript plugin was integrated with Eclipse for development.

- Followed stringent timelines for delivery of various components.

### ***Oracle Quality Assurance Online Services for E Biz Operations***

- Understood the complex code flow for the 4 tier architecture in the application.
- Enhanced and developed new modules as per requirements using **Java/J2EE, JSP, JavaScript**.
- **Used Oracle 10g as backend and developed SQL queries using Oracle SQL Developer.**
- Solved issues (Priority 1, 2) consistently below slated the turn-around time of 1 hour.
- Deployed the application artifacts in Oracle Application Server.
- Deployed a sanity check standalone application.
- 30% improvement in system performance after suggesting and implementing new work-around and enhancements.
- Monitored the various bugs and enhancements requests placed in **Bugzilla** and worked to fix them.
- Extensively used and promoted best practices of coding while development.
- Interacted with end users to understand the scope of impact for a particular enhancement or bug fix.

### ***Oracle Reporting Management System for Product & Query Tools***

- Upgraded parts of the existing M2 architecture to **MVC using the Struts framework**.
- Developed three assigned modules using **JAVA/J2EE, JSP**.
- **Oracle 10 g was used as the backend database and SQL Developer for developing the SQL Queries.**
- Contributed in designing the class diagrams and structure of the modules.
- Orchestrated an architectural change that increased the speed of the application using connection pooling.
- Used a database access feature, developed internally, similar to hibernate in order to query the database.
- Interacted with **UNIX environment** in order to deploy the class files and work with the **Oracle Applications Server**.
- Developed **reusable Java utility** components for business logic functionalities.
- Developed all JSPs, action classes and helper classes involved across the three modules of the project.
- Made fixes and changes to the existing application.

**Wipro Technologies, Bangalore, India**

**Project Engineer**

**July 2005 – January 2007**

### ***Asset Disposition System for Gillette (P&G)***

- Developed the **Java/J2EE based web application** as per functional specifications.
- Designed and developed **Java classes, JSP Pages, Action Beans and Action classes**.
- The presentation layer was developed using Macromedia Dreamweaver
- Used **Struts framework 1.3.5** for the separation of concerns.
- Used the **Singleton** pattern to implement an application data cache.
- Used **CVS** for version control.
- Involved in the entire **Software Development Life Cycle**.
- Used **JSTL** to develop the Front end.
- Interacted timely with client and upper management to update about development activities and progress made.
- **Apache Tomcat Server** was used to deploy the web application at client's server.
- Adhered to **strict coding standards** and used a proprietary plugin to generate comments on coding standards.
- **Oracle 8i** was used as the back end and **PL/SQL developer** was the tool used to develop the queries.
- Wrote Stored procedures in Oracle SQL to implement complex functionality.
- Interacted with the client to gather requirements, performed business analysis, suggested solutions.
- Efficiently used tools such as **Use Cases, UML, ER diagrams** to track requirements.
- **Realized 21%** improvement in the client's internal processes.
- Analyzed, designed and developed the database (Oracle) schema and module task units.
- Prepared extensive test cases and performed unit and regression tests.
- Supported the application single handedly after team members were released from the project, to the satisfaction of the client.
- Wrote user documentation as per client's requirement.

## RESEARCH EXPERIENCE

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### University of Arizona, Tucson, AZ

August 2009 – December 2010

#### **Research Assistant/Developer - Fine-Grained Semantic Markup of Descriptive Data for Knowledge Applications in Biodiversity Domains (NSF Funded)**

- Developed new desktop GUI as well as web UI modules for the Semantic Parser using **Java, Swing, SWT and XML**
- Used **Swing and XML** to generate a **graph model** to simulate a web of related terms.
- Replicated the functionality of the parser in a web application using **JSP/Ajax**.
- Used the **DOM parser** extensively to create an API that could pool out information from various **REST based web services**.
- **MySQL** was used as the back end and **MySQL** developer tool was used to develop the database access queries.
- Used **Google Code / Subversion** for source control.
- Implemented the **Strategy Design Pattern** successfully to create a functionality of on the fly generation of groups of terms.
- Was appreciated and awarded "The Best Research Assistant of the Year 2010" as recognition of the efforts.

## PRESENTATIONS & PAPERS

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- **Presented a version of the Semantic Parser (in JAVA)**, developed as a part of Research Assistantship, at the TDWG Conference 2009, in Montpellier, France  
[http://mis.eller.arizona.edu/news/2009/student\\_presents\\_in\\_france\\_112009.asp](http://mis.eller.arizona.edu/news/2009/student_presents_in_france_112009.asp)
- **Cui, H., Sanyal P.P., & Yu C. (2010). Tools for Semantic Annotation of Taxonomic Descriptions.**  
In R. Setchi et al. (Eds.): Proceedings of 14th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems, Part IV, Lecture Notes in Artificial Intelligence 6279, pp. 506--516. Springer Heidelberg. Sept 8-10, 2010, Cardiff, Wales, UK.

## ACADEMIC PROJECTS

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### Bentley's House of Coffee & Tea, Tucson, AZ

January 2010 – April 2010

#### **Analyst - Google Online Marketing Challenge**

- Created online marketing campaigns using Google AdWords.
- Used Google Web Analytics to analyze web metrics and optimized.
- 13% increase in customer visits & \$2100 in profit after client's website was redesigned and the online campaigns were run.

### NachBaliye.COM : An Indian dance Odyssey

January 2010 – May 2010

#### **Analyst /Developer**

- Created a complete one stop informative online portal for Indian dances using **Java/JSP/Oracle**.
- Implemented an efficient data mining component (using Jaccard's coefficient) to create a recommender for similar dances.
- Mashed up 14 APIs - Flickr, YouTube, Google Calendar, Wikipedia, Twitter, Facebook, Amazon, Picasa, etc
- Invoked the APIs to gather information from their respective sources based on search done by users.
- The application tracked users based on their location and users from 18 different countries had visited the website.

### Mt. Lemmon SkyCenter, Tucson, AZ

August 2009 – December 2009

#### **Analyst /Developer - Event Scheduling & Reservation System**

- Created a **Java/J2EE based web application** with Oracle database as backend.
- Analyzed the business processes and gathered requirements.
- Created existing and "to-be" process diagrams with new suggestions.
- Integrated Google Sky API, a **REST Web service**, to show celestial objects based on keywords.