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Mark Jackson

Certified Enterprise Architect/Programmer

### Summary

* IT executive with 22 years of experience in the Information Technology field, worked in multiple high-transaction volume industries including: Media, fintech (Payment), Banking, Financial Services, Healthcare & Transportation.
* Demonstrated expertise in leading large as well as lean global teams across different Geography
* Specialties: AWS (VPC, CloudWatch, EC2, S3, CloudFront, RDS, ECS, Autoscaling, Load Balancing, API Gateway, Route 53, Amazon Polly), Emerging payments (methods and technologies), Docker, Kubernetes, kops, Apple Pay, Android Pay, Samsung Pay, PaaS, cloud technologies, Pivotal Cloud Foundry, Spark, mobile application development and strategy. Advanced mathematical and statistical computational techniques, cryptography, pattern recognition, artificial intelligence, computational intelligence, mentorship, leadership, communication skills
* An experienced project Manager, sun certified enterprise architect with 22 plus years of experience specialized in Java, Microservices architecture, web-based applications and distributed enterprise application development with high availability and scalability & integration using J2EE, SOA, Spring, Web Service & ORM(Hibernate/JPA) technology.
* Have thorough understanding of complete project life-cycle, Agile methodology, including requirement analysis, data modeling, systems analysis & design, development, deployment, Infrastructure requirement and testing.
* The experience includes Java/J2EE technologies, Spring, Spring Boot, Spring Data, Hibernate, JPA, EJB, Web services (JAX-WS, JAX-RPC, RESTful), JSON, XML, JAXB, XSL, XPATH, SOA, SOAP, WSDL, JSF, GWT, HTML, JSP, Servlets, JSON, JMS, LDAP, Drools Rule Engine, JBPM 5.3(BPMN2), Oracle, JavaScript, WML, C/C++, Rational Rose, CORBA, Struts.
* API Management using Apigee, AWS, AKANA(Soa Software).
* Worked with different HSM like Thales nshield HSM & Luna Safenet HSM.
* Worked with different application servers including Weblogic, Websphere, JBoss, Oracle Application Server 10g, Glassfish

### Education and Training:

*Sun Certified Enterprise Architect* for the Java Platform, Enterprise Edition 5 (Step 1 of 3) (CX-310-052) - 2009

*Sun Certified Business Component Developer* (EJB) - 2008.

*Sun Certified Java Programmer -* 2008.

B.S in Computer Science: Pune Institute of Computer Techonology - 1996.

Associate in Electronic and Telecommunication 1993.

### Technical Skills:

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| --- | --- |
| Java Technologies: | J2EE (EJB, JPA, JSF, JDBC, Servlets, JSP, JMS, JNDI, JTS), Spring Batch, Splunk, Apigee API Gateway, AWS(EC2, VPC, S3,ELB…) Pivotal Cloud Foundry, Spring Boot, Concourse, HazelCast Drools rule engine, jBPM, Spring, JPA, Hibernate, toplink, J2SE, J2ME, JavaFX, RMI, CORBA, Socket programming, Apache Struts, JAXP, JAXB, Stax, Java Webservices RESTful, JAX-WS, SOA, jUnit. |
| App servers | Web Logic, Web Sphere, Oracle Application Server 10g, Glassfish AppServer, JBoss |
| Design Methods & Methodologies: | UML, Design Patterns, agile methodology & product development |
| Databases: | MySQL, AWS Aurora, Oracle, Sybase, SQL server, SNBase |
| Tools & others: | Dockers, Apigee API Gateway, IntelliJ, Git, Splunk, Spark, Kafka, App Dynamics, Jmeter, Eclipse, STS, SVN, QuickTest Pro, Load Runner, Visio. |

### Professional Experience:

**ViaTouch Media** *June 17 to present*

**Principle Architect / Chief Technology Officer**

ViaTouch media is a start-up company with IOT shelf checkout for retail solution, as a CTO I worked with the Senior executives my duties included but not limited to the below:

* Recommend company technical vision and leading company’s technological development
* Recommend strategic plans and setting timelines for evaluation, development, and deployment of all technical, web, and mobile services
* Supervise system infrastructure to ensure functionality and efficiency
* Built quality assurance and data protection processes
* Use stakeholders’ feedback to inform necessary improvements and adjustments to technology
* Collaborating with department heads, Sales, production, and operations as advisor of all technologies involved with company
* Ensuring technology standards and best practices are met
* Supervising quality assurance processes, integration, and system tests
* Establishing software development process and set objectives for process
* Mentoring team members
* Monitoring performance profiling tools and procedures
* Maintaining network security with IT team
* Developing and implementing disaster and emergency recovery plans
* Defining company standards for software development.
* Studying current and new industry trends, technologies, and software development
* Studying information processing systems to evaluate effectiveness and make recommendations for improvement
* Ensuring company’s technological processes and service comply with all requirements, laws, and regulations
* Manage Machine Learning project which included Tensorflow and OpenCV for image recognition, Speech to Text & Text to Speech.

**Development:**

* AWS Cloud infrastructure setup for Viatouch Media which includes Virtual Private Network, RDS, CloudWatch, process monitors and alarming, VPN setup, API Gateway, Load balancing, Autoscaling, Setup Disaster recovery on AWS, blue-green deployment.
* Security setup as well as distributed system security solution.
* Payment solution to support EMV, MSR and Contactless transaction.
* Provided innovative payment solution to support various method of payment.
* VAS Enablement for Viatouch Media.
* Kubernetes and Docker containerization support.
* Platform includes: apigee API Management, Docker containers, Kubernetes, AWS(VPC [subnet, route table, NAT gateway, VPN], VPC link, EC2, Autoscaling, LoadBalancer, KOP, S3,CloudWatch, Amazon Gateway, CloudFront) , Java 8, Spring Boot, Spring Security, Intellij, Amazon Aurora, Spring Rest Docs, Jenkins CI/CD, Github, Spring Data, Spring Actuator, maven, JMS, Rabbit MQ, Basecamp.

**First Data** *June 15 to June 17*

**Enterprise Architect / V.P of Technology**

**Project : Payeezy API, Global Recurring Payment & ACH on File.**

* I lead a lean "special operations" team at First Data, our mission is to rapidly leverage emerging payments technologies into commercial projects. We empower our clients with the latest technologies that can help them grow their businesses. And we do so rapidly, with flawless execution, and responsive support.
* Provided innovative solution like ConnectPay and GRP.
* I manage development and engineering initiatives at First Data for Payeezy API, Global Recurring Payment and Connect Pay API.
* Mentor and train the developers to create highly scalable and concurrent applications.
* Provide guidance to the clients for secured Payment system.
* Prioritize and manage projects based on client needs.
* DUKPT Decryption for POS based Swipe transactions.
* Implemented Apple VAS & Apple Pay
* Additionally, we are developing innovative products in the ecommerce, mobile commerce and fraud detection spaces. We power many well-known ecommerce sites and mobile app's that accept payments.
* Platform includes: apigee API Management, Pivotal Cloud Foundry, Websphere App Server, Java 7, Spring Boot, Spark for ML and BigData, Kafka, Intellij, Splunk, Oracle DB 11g, Golden Gate replication, Spring Rest Docs, Concourse, Confluence, Spring Data, Spring Actuator, maven, Spring Batch, JMS, Thales HSM, Safenet Luna.

**First Data** *Feb 14 to June 15*

**Enterprise Architect / Director of Technology**

**Project : Payeezy API**

* Build from ground up in-app Apple Pay and payment API to commercialization in less than 6 months.
* Critical thinking and unique solution for complicated issues.
* Highly motivated and energetic team leader
* Payeezy API which processes high volume payment transaction and support Apple Pay, Android Pay & Samsung Pay.
* Platform includes: apigee API Management, Pivotal Cloud Foundry, Websphere App Server, Java 7, Spring Boot, Intellij, Splunk, Oracle DB 11g, Golden Gate replication, Spring Rest Docs, Concourse, Confluence, Spring Data, Spring Actuator, maven, Spring Batch, JMS, Thales HSM, Safenet Luna.

**Client - Citi Group** *March’ 12 to Feb’ 14*

**Sr. Enterprise Architect /Technical Project Manager**

**Project: Citi-KYC**

* Sr Architect/Technical Consultant for Citi Groups - Platform includes Java6,STS Eclipse IDE, Spring, Hibernate, Drools Rule Engine, JBPM, Websphere application server, spring batch, GWT, EhCache, RESTful Webservies UNIX/ windows platform, Cruise Control, Perf4J, Wiki, Maven, Sonar, Crucible, Unit Test, Easy Mock, autosys, SVN, MS Office, MS Project, Visio.
* Responsible for software architecture, application design and development, testing, code review, and support. As a Lead Architect, I am also responsible for understanding the requirement and define scope, define & sequence activity, Time estimation, develop schedule, team coordination, priority assessment, perform quality control, identify risk, Security analysis, hardware requirement, work with CATE engineering team to approve software restriction, create POC for different modules like client side rules, validation framework, jBPM Human Task integration with System, Distributed database requirement analysis and solution for data retrieval and storage, GWT MVP framework integration, SSO integration with Siteminder, Drools based risk module.
* Responsible for managing multiple teams in different time zone (around 80 people from India, Singapore, US – NY, NJ and FL teams)
* Design & developed unit testing, acceptance testing and regression testing.
* CitiKYC is a new initiative by Citi group to have a single compliance framework across globe to figure out the risk associated with client of Citi across different LOB. CitiKYC will be integrated with all different line of business including consumer, institutional, corporates, Banks, Government an Embassy across the globe. Risk calculation will be flexible enough to understand the type of client and based on member profile calculates the risk associated with the account. It also does the periodic review to maintain and keep the risk on account manageable. Different component of the CitiKYC module are Inbox (allows the work distribution), Risk Calculation, Periodic reviews, Data Privacy, Workflow management, HREC, Overlay process….

**Client - Novartis** *11/2011 to 03/2012*

**Enterprise Architect Consultant /Project Manager**

**Project : IRMA–P /IRMA-C**

* Responsibilities included software architecture and design, application design and development, testing, code review, deployment and support. As a project manager, I was also responsible to collect requirement, define scope, define & sequence activity, Time estimation, develop & control schedule, team coordination, priority assessment, perform quality control, identify risk, perform qualitative/quantitative risk analysis, plan and monitor risk, and support, status reporting
* As Enterprise Architect created framework for Novartis to allow IRMA system to integrate with different Vendor system using drools rule engine as well as messaging system.

**Client - Goldman Sachs** *10/10 –10/2011*

**Software Architect Consultant /Project Co-ordinator**

**Project: Treasury Control.**

* Architect/Technical Consultant for Goldman Sachs - Platform includes Java6,Eclipse IDE, Spring, Hibernate, JMS, Drools Rule Engine, UNIX/ windows platform, Team city, Maven, Sonar, Crucible, fisheye, FitNesse Test, Unit Test, Mockito, OBJ, keepalive, autosys, SVN, MS Office, MS Project.
* Responsibilities included software architecture and design, application design and development, testing, code review, deployment and support. As a project manager, I was also responsible to collect requirement, define scope, define & sequence activity, Time estimation, develop & control schedule, team coordination, priority assessment, perform quality control, identify risk, perform qualitative/quantitative risk analysis, plan and monitor risk, and support, status reporting
* Worked on Olympus and GPS (global payment system) system payment control system.
* Requirement analysis for different flow (Commodore -MVP Ops, PCust-PBOps , Factory-PBOps & CMO Ops)
* Design & developed regression testing to compare Olympus and GPS System.

**Client - Citi Group** *Sept’ 09 to Oct’10*

**Technical Consultant /Project Manager**

**Project : Commercial Credit Card**

* Technical Consultant for Citi group - Platform includes Weblogic Application server 10.3, Eclipse, Oracle 10g Database, jUnit, GWT, Web Services, JMS, Sun Solaris.
* Designed SSO system for different application like Library (document management system) and CCMS.
* Created audit log system to figure out issues on production system.
* Integrated Enterprise logging framework using LOG4J.
* Design, developed and managed real-time online credit card maintenance system with TSYS.

**Client - ACL** *April ’05 to Aug’ 09*

**Architect/Technical Consultant**

**Project: iAtlas**

* Architect/Technical Consultant for Atlantic Container Line - Platform includes Oracle Application server 10g J2EE Technologies, Spring, JPA(Hibernate), JDeveloper/Net Beans, Oracle 10g Database, Apache Webserver, Netscaler, JetForm,JSON, jUnit, QuickTest Pro, LoadRunner (functional & Stress Testing )MS Visio & MS Office.
* Responsibilities included project scope analysis, technology evaluation and selection, system architecture, software architecture and design, requirements analysis, team coordination, enhancement request analysis & planning, priority assessment, issue/risk management, design inputs and mentoring, application design and development, deployment and support, status reporting.
* Analyzed and designed iAtlas system which included different modules like customer management, Quotation and PCMS (pricing and cost management system), Shipment/Export import documentation, dispatch, equipment management System, EDI, User Administration and Reporting system.

**Project: EDI Integration to iAtlas (SOA)**

* Architect/Technical Consultant for Atlantic Container Line - Platform includes Oracle SOA Suite 10g J2EE Technologies, Web services, JDeveloper, Oracle 10g Database, BPEL, WSDL, WS-Coordination,WS-Transaction, WS-Security.
* Responsibilities included project scope analysis, technology evaluation and selection, system architecture, software architecture and design, requirements analysis, enhancement request analysis & planning, priority assessment, issue/risk management, design inputs , application design and development and status reporting.
* Analyzed and designed EDI integration to iAtlas system which included different modules like Shipment, dispatch, equipment management System.

**Project: JAxis**

* Technical Consultant for ACL- Platform includes J2SE/ web start, swing, Oracle Database 10g, XML, WebService, JPA, Spring
* This application is a client server/multi-tier application developed for pricing department of ACL. User can extract data from database and have the personal Access database so they can work on those data when away from the internal system. This system allowed the user to find the current business/ revenue information and the direction of the business so that they can figure out the problem before it appears.

**Project: Emergency Notification System**

* Technical Consultant for ACL- Platform includes J2SE, Glassfish Application server, Spring, JSF (ICEFaces), Oracle Database 10g, XML, JAX-WS WebService, JPA, Hibernate, LDAP.
* This application is a web front developed for ACL. This system was developed for notification when there is any kind of emergency like flood, explosion etc. This is to make sure employee is safe and secure and to figure out who is available.

**Project: Customer Management System**

* Technical Consultant for ACL- Platform includes J2ME toolkit from SUN,Oracle Application Server 10g, Blackberry JDE, Oracle Database 10g, XML,RESTful webservice, JAXB
* This project was for blackberry phone and was even designed for 3 tier web based using spring MVC , J2EE technology, Webservices & JPA.
* This application is developed for sale person of ACL. User can search for the customer, Retreives customer communication with the ACL Users, Get the latest business information for this customers and retrive complaints for the customer.

**Client - ACL** *April ’01 to March’05*

**Team Lead/Technical Consultant**

**Project: AIM**

* Team Lead/Technical Consultant for Atlantic Container Line - Platform includes Oracle Application server 9i J2EE Technologies, JDeveloper, Oracle 10g Database, Apache Webserver, Netscaler, MS-Access, MS Visio ,AS400, SAP & MS Office.
* Responsibilities include project scope analysis and feasibility, requirements analysis, software architecture and design, issue/risk management, and application design and development.
* Analyzed and designed AIM (Automated Information Management) system which was external website for the customers. This website included different modules like Cargo/Shipment/RORO Tracking, Rule base information delivery system, Security and login as user features, Statement of Account for customers retrieving data from different legacy system like AS400 and SAP.

*June’ 99 to March’01*  
**Senior Software Engineer**

**Project: AIG**

1. **Senior Software Engineer**/**Technical Lead** responsible for [www.aigi.com](http://www.aigi.com) - a corporate website for AIG International which included a **content management system** to publish and distribute their research.

* Development platform includes BEA Weblogic Application Server 5.1 (J2EE Technologies – Enterprise JavaBeans, Servlets and Java Server Pages) , Oracle, IIS and Verity Search Engine.
* OO design using Rational Rose(UML) and ERWin, using J2EE Enterprise Blueprints, following RUP processes.
* Lead team of 10 developers, system engineers, QA engineers and administrators.
* Responsibilities included project scope analysis, technology evaluation and selection, system architecture, software architecture and design, requirements analysis and task planning, task allocation, project tracking, team coordination, enhancement request analysis & planning, priority assessment, issue/risk management, design inputs and mentoring, application design and development, deployment and support, status reporting.

**Project: Columbia house**

1. Senior Developer for [www.columbiahouse.com](http://www.columbiahouse.com) – a corporate website for Columbia house music and DVD club.
2. Responsible for internal RAP (Rapid Application Prototyping) project to enable developers/leads to gain expertise in J2EE/Internet technologies.

* Development platform included IBM Websphere Application Server (EJB, Servlets and JSP), Oracle, LDAP & IIS.
* Design using Rational Rose(UML) and ERWin, using J2EE Design Patterns.
* This application was a client facing eCommerce website for Columbia house, which includes online transaction, full automation of the order transaction. It also supports promotions. It has following main features.
* System was build to support high transaction, high scalability and to support heavy load with fail over protection.
* It interacts with legacy system using CICS to get all member information, order processing, payment information, credit card payment, account receivable and account tracking for the current order.
* It had to interact with the legacy cgi site so that if legacy CICS is down the user doesn’t feel the difference interacting with the site.
* Involved in requirement, definition, design and development phase of Video and DVD Club and maintaining the Music club for Columbia house.

**Project: Centralized Logging System**

* Senior Engineer – Responsible for designing & developing Reusable Distributed logging system.
  + Implemented horizontal and vertical log levels. Messages are logged in XML format. Provided various API to use the mechanism. Provided web-based reporting facility. Also created web-based Admin module. Used peer-to-peer & public subscriber mechanism of JMS. This component is easy to integrate with other modules.

**Integrated System Management** *Nov’ 97 to Jun’99*  
**Senior Software Engineer**

* Senior Developer responsible for developing *Membership Registration System for Girl Scout* of USA. Technologies involved were Visual Basic, Active Report, Oracle and ADO
* This project was developed to handle all the activities regarding membership registration at the regional headquarter of the Girl Scout of the USA. The system Report were Creating Ad hoc Reports at runtime. Active Reports were used to design the reports. The System used client/server architecture
* Senior Developer responsible for developing *Vendor Management System* for ISM. Platform includes Netscape Application Server 3.0, JavaScript, Sybase & HTML.
* I was involved in designing and developing the system. Vendor Management System was an online web based application to shortlist, interview and select the candidates from different registered vendors. The candidate selection is done based on skills requirement and experience posted by the company. The Vendor Management System addresses all the security requirements such as allowing vendors and hiring managers to view only their respective data, allow only contract administrator to change system information.
* Senior Developer for *SEMY Engineering* – Platform includes C++, Java, CORBA(Orbix 2.2 MT on sun-SOLARIS), MOTIF
* Responsibilities included project scope analysis, technology evaluation and selection, system architecture, software architecture and design, requirements analysis, team coordination, enhancement request analysis & planning, priority assessment, issue/risk management, design inputs and mentoring, application design and development, deployment and support, status reporting.
* Developed **Tool Server for VTR (Vertical Thermal Reactor is the Diffusion fab Tool)**
* Responsibilities included in analysis, Design and development for VTR Tool server project. Also included in design and development of Communication framework for Semy Eng. It included different sub system.
* Tool Server: Tool Server is a multi threaded asynchronous application, which uses the SCF communication framework to communicate to the minispec Editor, Run tool and tool status. The tool Server is used to automate the actual tool and control all the states so that it does not allow the wrong information to pass to the actual tool and execute the command that are provided by the Run Tool or any other application.
* File Access Server: File Access Server is a server, which gives the facility to the Java application to access the file and give the SCCS facility so that they can maintain the version of the file.
* Event Server: Event Server is multi-threaded distributed application, designed for the Java Client application to communicate to the tool server so that at any particular time the application on machine can give some particular command, which the tool server can understand.