

ARVIND RAO

Technology Consultant

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Seasoned technologist with **13 years of experience in technology architecture, product engineering, backend design and development**. Domain experience in **e-commerce, manufacturing and capital markets**.

If you're looking for someone to rapidly ramp up and deliver results - **lead a technology team, engage clients to gauge business needs, or just code as a hands-on individual contributor**, call me. I'm **available to start immediately**.

KEY ACHIEVEMENTS

- **Architected B2B e-commerce product** focused on aftermarket part sales for OEMs. Worked closely with manufacturers' business and IT teams to implement and launch the product at various locations in the US and Europe.
- **Rapid research and implementation** of solutions for systems integration. Recent examples include integration of the e-commerce product with the Ariba B2B supplier network. Also integrated with an identity broker solution named Auth0 for SSO with applications that spoke different protocols with complex identity management rules.
- **Improved performance** of web applications and batch jobs. Examples include resolving various issues in an e-commerce product's ERP integration layer, significantly improving the end-user experience for real-time pricing and checkout. Back in 2005, an AML compliance banking solution batch job that processed 1 million customer transactions daily had an execution time of 4-5 hours - this was brought down to 2 minutes.
- **Successful implementation of major trading technology projects** - Tokyo Stock Exchange's Arrowhead in 2010 and Korea Exchange's Millennium in 2009 - with zero downtime or issues on the go-live date.
- **Rapid resolution of production issues** - system failures, connectivity outages - in high pressure situations such as those on the trading floor where every second counts.
- **Closely interfacing with clients** to understand their business needs and enhancing solutions to add business value. Recently integrated Kibana to build analytics dashboards that provide insight to key metrics of an e-commerce solution.
- **Building and leading high performance technology teams** - in my last engagement as Technical Manager, I helped grow the product development team from 3 to more than 20.
- Completed course in **machine learning** from Stanford University on Coursera – With a keen interest in applying machine learning and artificial intelligence to solve business problems, wrote a white paper: <http://www.arvindrao.in/whitepapers/ArvindRao-PredictingMarketDirectionWithMachineLearning.pdf>

RECENT EXPERIENCE

As an independent Technology Consultant, I worked on the engagements listed below:

June 2016 to August 2016 - ThoughtFocus Information Technologies, Bangalore

- **Automated customer and item master data updates in e-commerce system** using feeds from ERP systems.
- Separated product and implementation-specific code bases and established new build process for **improved product management**.
- Technologies: Java, Maven, Spring, JPA, Hibernate, SQL Server, stored procedures.

November 2015 to March 2016 - ThoughtFocus Information Technologies, Bangalore

- **Implemented B2B e-commerce product** for manufacturing clients (I was the technology architect for the product between 2012-15)

- Worked closely with clients for **analyzing customization requests and integrating product with ERP systems** across different business units.
- Wrote **business and technical specification documents** for implementation team. Led **design and development** for a major change request to **integrate product with two B2B platforms - Ariba and SmartEquip**. cXML was used for Ariba integration and EDI for SmartEquip.
- Technologies: Java, Spring, JPA, Hibernate, SQL Server, RESTful and SOAP-based web services, cXML, EDI, Single Sign-on (SAML protocol).

PRIOR EXPERIENCE

January 2012 to September 2015 – Technical Manager

ThoughtFocus Information Technologies, Bangalore - A software product engineering, IT services and business processing company. I led a team of 20 developers in the product engineering group.

- **Architect for a B2B e-commerce product** that brings an enhanced customer experience to the aftermarket part sales business. Involved in **hands-on design and development** since inception of the product in 2012.
- Focused primarily on OEMs and their customers, this web-based product provides **rich product catalogs** with full machine views, **interactive 3D and 2D graphics, real-time price/availability, quotation and order management** integrated with the customer's ERP.
- Integrated **ElasticSearch**, a Lucene-based engine for enhancing search experience in the product. Also integrated Kibana and designed **analytics dashboards** for giving insights into key metrics such as order volume and inventory.
- **Setup and management of all environments** including Production.
- **Worked closely with customers** to analyze business and customization requirements, plan for and schedule releases. On-boarded two customers, with **USD 2 million in part sales** through the product.
- Helped **grow the development team** from 3 people in 2012 to 20 people in 2015.
- Technologies: Java, Spring, JPA, Hibernate, HMTL5, Bootstrap, Ajax, jQuery, Flex, Elasticsearch, Logstash, Kibana, Ehcache, SQL Server, Tomcat, Apache httpd, Red5 media server, Git, SVG, SAP Visual Enterprise Viewer, Windows Server 2008, RESTful and SOAP-based web services, Single Sign-on (SAML protocol).

September 2008 to June 2011 – Analyst, Front-Office Trading Systems

CLSA Hong Kong/Pune - Asia's leading brokerage and equity research firm. I was part of the front-office trading systems team.

- **Supported order management systems and exchange connectivity** for Asia-Pacific markets.
- **Setup the DMA algorithmic trading platform**. This included configuration and deployment of the application, coordination with the trading desk, FIX connectivity teams and testing teams.
- **Implemented major exchange connectivity upgrade projects**; including Tokyo Stock Exchange's Arrowhead (Jan 2010) and Korea Stock Exchange's Millennium (April 2009)
- Technologies: Sungard GL Trade, Linux, Perl, Oracle

May 2003 to September 2008 – Senior Associate, Trading and Risk Management

Sapient Corporation, Bangalore/Gurgaon – A leading consultancy and technology services firm, now a subsidiary of the Publicis group. I worked with the clients listed below:

April 2008 to September 2008 - Developer, Back-office recon system for Citadel Investment Group

- Perl based ETL system processed a large number of files received daily from brokers, containing the firm's end-of-day positions and valuation statements for various products.
- **Built tools with transformation logic and business rules** to process broker files, load positions and match against other systems to identify trade breaks.
- Technology: Perl, SQL, Sybase

August 2006 to April 2008 - Support Analyst, High Frequency Trading for Citadel Investment Group

- **Supported the high-frequency algorithmic trading system** for Asia-Pacific and European markets.
- **Developed tools to enhance support operations**, including market data monitoring and reconciling positions.
- Worked with traders based in Chicago, Hong Kong and London.
- Technology: Perl, Linux, SQL, Sybase

September 2004 to Feb 2006 - Developer and Team Lead, AML compliance reporting for Scotiabank

- Java based anti-money laundering system comprised of transaction processing and reporting jobs that analyzed large volumes of transactions from the bank's domestic branches.
- Suspicious transactions were automatically reported to the Canadian regulatory agency.
- **Designed and developed major enhancements** for the system.
- **Conducted business design sessions** with client teams in Toronto.
- **Improved performance, stability and usability** of application that processed 1 million customer transactions daily.
- **Planned for application releases and test schedules**, and managed a 4 person team.
- Technology: Java, SQL, DB2, AIX.

August 2003 to September 2004 - Developer, Contract and gas management application for Enbridge Gas Distribution

- Developed billing report and prior period adjustment modules. This involved **building server-side business layer components** in Java and PL/SQL procedures.
- Application developed for this Canadian energy utility to enable it to effectively reconcile volumetric and remittance differences.
- Technology: Java, PL/SQL, Oracle 9i

June 2003 to July 2003 - Developer, Customer rewards site for Liberty Mutual

- **Developed a website for home and auto insurance customers** of this insurance firm.
- Application was a mini-CMS implementation with content streaming from a SQL Server database.
- Technology: C#, ASP.NET, SQL, MS SQL Server

EDUCATION

Masters in Computer Applications from Guru Gobind Singh Indraprastha University, Delhi (2003)

Bachelor of Science, Electronics (Honours) from Delhi University, New Delhi (2000)

CERTIFICATIONS

Machine Learning by Stanford University on Coursera - August 2016

<https://www.coursera.org/account/accomplishments/certificate/CGTS7ZR67QBG>

OTHER INFORMATION

My independent work is showcased at <http://www.arvindrao.in>.

Visit my technology blog at <http://bytes.arvindrao.in>.

Cleared Level 1 of the CFA Examination (CFA Institute, USA) in 2007.

On pro-bono and independent projects – have also worked on PHP, MySQL, Google App Engine, AWS, Python and machine learning libraries such as PyBrain and scikit-learn.