MANMOHAN UTTARWAR

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SUMMARY: 12+ years of IT experience in design, development & maintenance of OO, Core Java, Swing, C#, WPF, Python, etc. 10+ years in Financial Services, Banking & Capital Markets industry in Front Office E-Trading technology application development & leading in areas such as Cash Equities, FX, Fixed Income & Derivatives, CFA L-1 business understanding with 8+ years Lead hands-on Project/Application management experience in SDLC activities, Agile, Scrum, DevOps including Req. Spec Analysis, Design, Development (Coding, Testing, Deployment) & Implementation at the client sites with emphasis on Object-Oriented (D/M), solutions, etc. for applications in Core JAVA and beyond.

EDUCATION:

Masters in Software Engineering	Bachelor of Engineering	Diploma in Software Development
Kansas State University, Manhattan, KS	Nagpur University, India	NIIT, India

CERTIFICATION:

- SUN certified & Brain Bench Certified Programmer for Java 2 Platform 1.4 (SCJP 2) & Java 1.6 (in Progress)
- CFA Level II Candidate
- Brain Bench certified for DBMS.
- Wall Street Business and Financial Technology Certified
- Series 7 for General Securities FINRA Certification as Registered Representative (in Progress)
- Series 72 for Government Securities FINRA Certification as Limited Representative for US Treasuries - Government Securities, Agency Securities & Agency-backed Mortgage Securities (in Progress)

EXPERIENCE:

AMERICAN SOFTWARE (May 2012 to Present) **New York, NY**
CLIENT: HSBC Securities – Global Banking & Markets - Front Office - Sr. Java Financial Developer
FX Cash & Derivatives, Commodities & Metals IT, e-Treasury

Remittance Settling, a multi-billion-dollar business for institutional and retail trading across 30 different currencies in 5 continental markets like Americas, Europe, Africa, APAC & Oceania for various FX exposures, hedging, risk mitigation, for fixed income, equities, commodities asset classes and also for plain FX cross currency dealings. Usage of various internal systems HSBCNet & external B-2-B trading systems fed all institutional & retail FX orders for carrying daily FX trading business. Additionally, Bloomberg Adapter fed relevant futures trades into New Front Office System (NFOS) for trading, settlement & booking purposes. Provided trade support for Traiana Adapter GUI.

- Led multiple hands-on Java 1.6 / 1.7 based coding / development projects with a global team based in New York, London, Hong Kong, Canada, China, etc. with a team size of overall 10 to 15 resources involved from developers, BA, support and reporting into Global business & IT heads.
- Worked with Global head of FX-RS business team, FX traders, Business Analysts, Prod Support, etc. regularly & consistently to come-up with business requirements that affected institutional flow business as well as direct retail business in an agile environment following a DevOps model.
- Led the coding effort to migrate Bloomberg Adapter FX Futures Sybase 12.5 database onto a MS SQL Server database & achieved enhanced database performance & modified, optimized requisite SQL Scripts, stored procedures, dependent Java & JDBC In-line code to work seamlessly on newly ported database.
- Optimized, refactored, re-configured and re-designed Java 1.6 / 1.7 logic using inconsistencies found in UI trade flows into Murex 3.1 for Bloomberg Adapter that filtered Bond futures FX trades.
- Created, built, enhanced remittance settling SWIFT MT103 conforming validation rules to process FX trades across 30 currencies & multiple markets using Java, Swift, MQ via GMG (group message gateway), GFIX, prop market data & pricing via flexrate, flowing to FXP, GPS for end to end payment processing & settlements.
- Performed Unit & regression testing for each release bound requirement through localized & UAT Envs.
- Utilized & setup RTC & GIT repositories, RTC based issue tracking & JIRA items for priority & task assignments, POM configs for resources linkage, maven builds, Continuous integration using auto builds.
- Worked on restoring the Traiana Adapter GUI build in Swing that filtered NFOS trades using certain trade criteria to database & its access via Swing UI screens.

Environment: Core Java 1.7/1.6, Spring 3.3, MQ Series, JMS 1.1, FIX 4.2, SWIFT MT103, Murex 3.1, MS Visio, GIT, Stash, XML, RTC Version Control, Maven, Subversion (SVN), Scrum, MS SQL Server, Sybase IQ 15, SQuirreL SQL, Aqua Data Studio, MS Visio, Jira, Confluence, Agile Development Programming / Test Driven Development (TDD) / Scripts (Shell, PERL), Unix / Linux

CLIENT: WELLS FARGO - FX Derivatives - Pricing & Valuations, Market Risk, CVA
(FX-Options, FX-Forwards, Swaps) for FX Risk Services – Sr. Java Financial Developer

Pricing and Valuation of various FX-Option types including different flavors of FX Vanilla Options, FX Asian Options, FX Barrier Option, etc for calculating firms Portfolio value, evaluating Risk exposure and hedging it to create a Risk-Free Portfolio daily & mitigating Counter Party Credit Risk and for the CVA / DVA calculations, etc

- Worked daily with a team of 6 FX Quants for portfolio pricing and valuation of 20 different currency pair trades between FENICS and proprietary FIX Quant library.
- Lead team of 12 developers & interfaced with 6 Quants to drive various efforts on pricing & valuation for FX Options.
- Performed End-To End Portfolio Testing verify Model based pricing v/s vendor product pricing differences & resolved various coding, logical, market data and quant library issues by working with FX Quants to compress those variances for over 20 currency pairs.
- Created NPVLoader process for all books including & beyond G-10 currency combinations and compared it against the FENICS PV report for valuations purposes and to prime & source via Oracle 11g DB & Coherence Cache Cluster like FX Positions data, FX Contract data, FX Trade data, etc
- Optimized, refactored, re-configured, genericized and re-designed various FX Vanilla, FX-Asian, FX-Barrier option pricing code by making it more performance intensive by reducing the calculation time for a portfolio of all books by a factor of 20 using buffers, appropriate cache calls, finding code inconsistencies, etc.
- Created a Trade publish, JMX Mbean to be routed from an alternate environment.
- Created various JMX jobs to bring in Market Data like Spots (Intraday, closing), Volatility Surfaces and source Calypso rate curves, Cure IR curves into various Fenics envs.
- For FX Vanilla Options, working directly with multiple Quants to create an American Option pricing coded, verified against proprietary FX Analytics & Quant library.
- Built the FX Asian option fixings, flipped fixings and Spothistory code for appropriate pricing and valuation from the Analytics and Quant library.
- Built & created various Fenics database scripts for backup, restore, config setup, redirect market data to pull most recent data for pricing & valuation purposes between various environments.
- Setup, Refactored, reconfigured various Spring and Hibernate config files to optimize flows.

Environment: Core Java 1.7/1.6, Spring 3.2, Hibernate, FENICS 12.1, JMX Plus 2.0, Oracle 11g, Coherence Cache, MS Visio, Maven, Subversion (SVN), Scrum, MySQL, Aqua Data Studio, Sybase 12.5, Jira, Agile Development Programming / Test Driven Development (TDD) / JUnit, Scripts (Shell, PERL), Unix / Linux, Data Synapse Grid, Autosys, Confluence, Symphony Galaxy EQD Viewer, GXL

CLIENT: MORGAN STANLEY – PRIME BROKERAGE
Morgan Stanley Portfolio Performance Measurement (MSPM – MSSB) – Fund Services
Sr. Java Financial Consultant – (Institutional Services Group Technology – Multi-Asset)
Build Morgan Stanley's Grid Performance Calculations Engine with 800+ metrics for Prime Brokerage Institutional clients trading in High volume & holding large positions per account of equities, etfs, bonds, derivatives, etc and port it to the MSSB retail business application currently on multiple mainframe systems to a single distributed system. Key issues like Metrics, Volume, Data & Reporting were addressed.

- Evaluated technical architecture for existing Morgan Stanley's Portfolio Performance metrics for Institutional clients & building a system for Smith Barney's Retail Performance metrics.
- Gathered technical requirements for MSPM application & built metrics & strategies by coordinating with business users both for equity securities, etfs, & fixed income instruments including bonds, interest rates, etc.
- Application development in Java 1.5 / Java SE 1.6 for servicing Prime Brokerage Fund Services clients like MSSB and built their retail Portfolio Performance measurement metrics.
- Built a distributed caching system using Gemfire 6.5 to evaluate performance of Calcs with 5-6 TB of data.
- Improved n-tier application performance for data access using Gemfire 6.5 caching in HA mode, configuring cache.xml with various setting like replicate, persistent, etc & stored data on regions via key/value mapping & also compared similar performance patterns for 10+ industry prevalent caching solutions like MemcacheD, etc.
- Created new & modified old Sybase and DB2 DPF schemas, Stored procedures, views & functions.
- Perforce for version control was used for majority of the source code maintenance.
- Worked on Test Driven Development approach for new code and wrote JUnit tests for the existing code in Java 6 especially adapting & making it Spring 3.0 compatible using Autowired & Spring Config setups.

Environment: Core Java 1.7/1.6/1.5, Spring 3.0, MQ Series, JMS, Adobe Flex, Ivy dependencies, Distributed Caching with Gemfire 6.5 / MemCacheD, distributed computing, SQL Server Data Modeler, Visio, Perforce, DB2 DPF, Sybase 12.5 using DB Artisan tool for Sybase & DB2 DPF, Agile Programming / Test Driven Development (TDD) / JUnit, Scripts (Shell, PERL), Unix / Linux., Zookeeper, Leela Component Mgmt, DB Artisan, Rapid SQL

PACIFIC INVESTMENT MANAGEMENT COMPANY – PIMCO (Sept. 10 to Feb 11) **New York, NY**
Portfolio Management – PIMCO Global EqS Pathfinder Strategy (Institutional Equities – Front office)

Equities Capital Market – Equities Technology (Electronic Trading),
V.P / Lead Sr. Financial Developer – Equities Technology

- Designed, developed, maintained & supported the applications and reports for Global Equity Pathfinder Deep Value, distressed asset and Mergers & Acquisition (M&A) based investment strategy for PIMCO Portfolio Managers / Traders managing their equity fund ($1.6 billion) using Bloomberg-Anywhere (BBA) electronic trading systems through BDS, against standard benchmarks(BENC) using different MODELs, each focusing on multiple strategies and executing trades using Bloomberg EMSX when rebalancing portfolios, sending block trades / orders to multiple markets across North America (US, Canada), Europe - London & Asia - SGP / HK.
- Gathered technical requirements for fund and Portfolio strategies by coordinating with business users such as portfolio managers, head traders, trade assistants to service their global equities needs using Python 2.6 scripts and fetching data from Oracle 11g and Sybase tables.
- Designed a data model using Oracle SQL Server Data Modeler to store / retrieve trade data for Portfolio Manager's strategies into the Sybase & Oracle database tables.
- Developed a front office process for PMs, traders and trade assistants that showed Portfolio profit and loss (PnL) changes due to daily price variations using Sybase, Oracle and Python.
- Designed, developed and maintained a daily market value reconciliation tool for front and middle office that showed trade date and settlement date cash differences.
- Application development in Java 1.5 / Java SE 1.6 for servicing Equities Portfolio manager and trader data needs and worked towards Swing UI for their daily data access.
- Conceptualized & designed process for tracking BENC changes for portfolio performance over time for MODELs created by traders, PMs, etc using Bloomberg Anywhere.
- Worked on PyCharm 1.1 IDE for writing Python 2.6 compliant scripts to create Market Value reconciliation daily reports to verify trade date cash differences as seen in Bloomberg systems and firms back office SMARTS systems for middle office to compare and provide recap of available cash to traders.
- Due to multiple databases plugged into different systems, stored procedures, functions, and views in Sybase using iSQL & Oracle 11g were developed.

Environment: JSE 1.6/1.5, Java, Python 2.6 using IDE PyCharm 1.1, C#, WPF, SQL Server Data Modeler, Visio, Perforce, Sybase, iSQL tool for Sybase, Oracle 11g, agile Programming methodologies, Bloomberg Anywhere (BBA) trading system (OMS / EMSX), scripts (Shell, PERL)

CANTOR FITZGERALD & CO / SECURITIES (Nov. 07 – Jun. 10) **New York, NY**
OATS – Order Audit Trail System (Institutional Cash Equities – Front office)
Equities (Capital Market) – Front Office Technology **Lead Java Developer – Equities ITD**

- Designed, developed, maintained & managed the FINRA mandated OATS for Cantor's Cash Equities division to integrate the Audit Trail of orders, quotes & trade information for (OTC) NASDAQ securities to correctly match & report the two sides of the orders processed through different stages in a trail like New Orders and different records (Desk, Route, Execution, Replace, Cancel reports) in order to comply and monitor the trading practices of member firms. Order feeds came in from Program & Algo Trading desk (Portfolio Trading / Portfolio Manager) Fidessa(FTW) Order Management System (OMS), Fidessa(FTW) Execution Management System (EMS), orders (NMS) processed through FIX Engine (STP), Bloomberg systems, etc & consolidated after processing through Firm's OATS compliance engine & sent to FINRA on a daily basis.
- Led a team of 10+ people ranging from co-ordinating with traders, business analyst, compliance & technology resources to make sure the firm complied to FINRA guidelines for OATS purposes.
- Led and extensively interfaced / interacted with multiple external teams from non member clients, members, broker dealers, ECNs and exchanges to enhance existing features, resolve complex business issues contributing towards OATS breaks.
- Developed, delivered & managed applications to conform to firm's obligations towards market regulations for OATS addressed to senior management, compliance, technology, operations, systems & trading for various FINRA releases & enhancements.
- Application development was in Java 1.5 / Java SE 1.6 of the Equities Cash IT Compliance systems including OATS, ACT, OTS, and Bluesheets and possessed knowledge of the compliance rules associated with Cash Equities Trading (NMS) like OATS, ACT, Reg Sho, Rule 92, Manning rule, etc.
- Designed iteratively and conceptualized multiple software requirements using Visio tool for UML methodology like Use Cases, Object & Sequence diagrams for a multi-tiered Instituitional Cash Equities System that interfaced / depended on Fidessa Order Management System / Execution Management System (OMS / EMS) for trade data provisioned from front office users (Sales traders, head traders, traders, trade support).
- Effectively utilized and implemented other GoF design patterns like flyweight, singleton, factory method, etc to organize & modularize source code and design patterns like MVC, business delegate, DAO, etc .

- Extracted, formatted and segregated data from Program & Algo Trading (Portfolio Trading & Portfolio Manager) desk systems, scheduled tasks for uploads onto MS SQL Server 2000 / 2005 using local packages, stored procedures, views in MS SQL, etc.
- Built, enhanced, maintained & complied to FINRA requirements for OATS reporting by creating proprietary JAVA parsers like FidessaOATSParser(Fidessa Montage), PTDOATSParser(Program & Algo Trading) and TEAMOATSParser (Manual Orders) all using J2SE 1.5 and Java SE 1.6.
- IntelliJ 7.05 IDE as development environment using client and remote server dynamic debugging with Perforce for version control was used.
- Due to multiple databases plugged into different systems, Stored Procedures, functions, and views in Sybase, Oracle 11i & MS SQL using Embarcadero Rapid SQL 7.3 & MS SQL Server 2000 / 2005 with extensive use of callable & prepared statements embedded within various Javabeans and other classes.

Environment: J2SE 1.4.14/1.5, Java, UML using Rational Rose, Visio, Perforce, XML, JUnit, JDBC 2.x, Sybase, MS SQL using SQL Server 2000 / 2005, Embarcadero Rapid SQL tool for Sybase, IDE IntelliJ 7.05 , agile Programming methodologies, scripts(Shell, PERL), Fidessa OMS / EMS

International Trading – Belzberg Institutional Execution / Order Management System
Division: Equities Capital Market - Institutional

- Created the ability for International trading desk in New York to trade securities on Canadian bourses through its US local & satellite offices in Canada for all its European Institutional client orders in Canadian securities but all orders routed via its subsidiary Cantor Fitzgerald Europe in London for various business reasons. The Belzberg Institutional OMS collects orders and blocks from any Belzberg connection, aggregates and allocate clients' and traders' orders in real time, Internalize flow and slice orders from one screen, accept or bust orders at any point, designate trade instructions, chat live with clients, assigns a set of rules and applies those rules to route or capture the order & apply filters.
- Global exposure in co-ordinating with traders, business analysts and technology resources scattered in multiple markets including United States, Canada, Europe and Asia. (New York, Toronto, London, Hong Kong)
- Led a (end-2-end) a team of traders, middle office and back office resources to create trading universe (front -2-back office) for process executions w.r.t international trading for data processing on a high frequency low latency, smart order routed (SOR), TSX connected OMS for International Trading desk.
- Extensive used Stored Proc functions, views in Sybase using Embarcadero Rapid SQL 7.3 with focus on leveraging the use of callable & prepared statements.
- Developed & enhanced TicketWriter a J2SE 1.5 / Java SE 1.6 & SWING UI intensive multi-threading and synchronization specific low level component based multi screen data driven application for assigning client inventories, commissions, specified settlement dates, allocation of fills, identify outstanding / completed trader tickets, keep order history, etc. considering SWING strengths & limitations and still giving users virtually smoother transitions.
- Established a FIX drop copy session using FIX Protocol 4.2 with Belzberg OMS for realtime archiving of the trading activity so that Cantor's back office can look at the raw trades before settlement data was made available the next day in Penson systems
- Accomplished the use of Shell and Perl scripts to run CronJobs for Auto Scheduling and Autosys for process dependency and time triggered task management.
- Established, installed & enabled the firm's clearing and settlement agent for all Canadian trading with Penson Financial Services which also maintains trade books and records.

Environment: J2SE 1.4.14/1.5 / 1.6, Java, Swing, IDE IntelliJ 7.05, UML, Visio, Perforce, XML, JUnit, JDBC 2.x, Sybase, FIX Protocol 4.2, Embarcadero Rapid SQL for Sybase, scripts(Shell, PERL), Belzberg OMS / EMS

StockLoan

- Cantor Fitzgerald's Equity Finance Group integrated US Domestic & International securities lending with Derivative Finance and Structured Products to provide customers with powerful solutions to all their securities lending and financing needs.
- All Equity professionals dedicated to trading specialized products in the global markets, provided customers with analytical approach a detailed insight into critical market factors such as supply/demand, liquidity, borrowing/lending rates, dividend and corporate action entitlements and a wide range of transaction structures.
- The system interfaced with Sungard's LoaNet, enabled the user to create tickets for borrows and loans, to create turn-arounds, perform rate changes, display credit limit for brokers, monitor unmatched deals, all returns, entire daily activities and store data for historical purposes.

Environment: J2SE 1.5 / 1.6, JEE, JSP, Servlets, IDE IntelliJ 7.05, UML using Visio, Perforce, XML, JDBC 2.x, Sybase, FIX Protocol 4.2, Embarcadero Rapid SQL for Sybase, PERL scripts, Tomcat, Junit

Securities Lending / EzToBorrow

- Cantor's Securities Lending Desk focused on hedging activities and Short Sales within the Equities market space identifying and connecting lenders and borrowers to maximize opportunities.
- Compliance application interfacing with our order management system identifying stocks that are Easy To Borrow, meaning the firm has at least 500,000 shares of inventory and is not contained within any threshold list.

Environment: VB .NET, ASP.NET, MS SQL Server 2005 / 2008, Visual Studio 2008, Sybase, Visio, Perforce, Excel Suite, Embarcadero Rapid SQL for Sybase

WELLINGTON MANAGEMENT (Nov. 06 – Nov. 07) **Boston / Marlborough, MA**

Investment Systems - Global Trading System (GTS) – (HDS) Historical Data

Senior Java, Swing Consultant via Technoseva Incorporated

- Fixed Income (FI) trading desk (NYSE / NASDAQ), co-located in Boston and London (FTSE) office, interfaces with Bloomberg and Calypso for analytical data, executed approx. 200,000 trades totaling over $700 billion for long term debt electronically through TradeWeb and MarketAxess. Traders, head trader, portfolio managers and Global Execution Services team needed access to information telling them when, what, with whom, and at what relative level these trades executed and Trade History, assisted trader while trading this bond, issuer, or sector again, head trader aggregated it when dealing with brokerage firms providing information as to how well the dealer competes for trades, to GES for best execution, provided context for trade analysis, retention & ability to perform ad-hoc analysis also improved execution capabilities & helped for account position reconciliation. Issues addressed: insufficient capture of relevant trade and contextual information at trade execution, difficulty with capture of this information, inability to effectively access trade data for future execution analysis; help log trade specific information in electronic format and to allow access through single interface like trade blotter or through a query tool.
- Income (FI) Global Trading System that used Market Access and Trade Web and interfaced with Bloomberg to extract execution specific information.
- Messages exchanged using FIX protocol in case of Market Axess, Bloomberg, etc for the retrieval of pricing information to indicate trade levels & use of Calypso in the context of GTS on Equities derivatives for Swaps like calculation of accrued interest were done.
- Continuous interaction with traders, head traders & business analysts on business requirements to gather and to evolve into software specific ones while still mapping them to the existing trade engine to customize it onto respective blotters or GUI screens so as to capture or display the trade execution data.
- Systematic and careful usage of Java & SWING UI specific multi-threading and synchronization concepts to launch newer screens or update UI data across multiple screens considering SWING strengths & limitations and still giving users virtually smoother transitions.
- Stored Procedures, functions in PL/SQL using PL/SQL Developer for Oracle 10g with extensive use of callable & prepared statements within normal & enterprise Javabeans and other classes.
- Used Embarcadero's Rapid SQL tool for Sybase in conjunction with Oracle 10g within the scope of Appix Adapter that helped segregate & consolidate trade execution data from a trade basket into user specified groups of data components for Mortgage Backed Securities (MBS) team.

Environment: J2SE 1.4.2/1.5, Java SWING, JGoodies Framework, UML using Rational Rose, J2EE, EJB, Hibernate, Weblogic 9.2 / 8.1 SP3 /, Accurev 3.2, XML, JUnit, JDBC 2.x, PL SQL Developer, Oracle 10g, Embarcadero Rapid SQL, Sybase, with Eclipse 3.2 using agile programming methodologies.

Portfolio Manager Workstation (PMW) – (SDP) Strategic Derivatives Program

- Construction & integration of complex module for the asset allocation group, natural resources team & derivatives strategist that needed to implement the ability in PMW to lookup the Total Return Swaps (TRS) securities on indexed futures for Equity Derivatives & their current positions, create & update individual authorization on these securities in units, percent of portfolios or holding qty, submit to compliance to obtain pre-trade certification, submit to trading for executions, view open orders, etc. Scope included integration with investment view, validation & authorizations for transaction code against open orders, view swap characteristics, compute MV, perform compliance checks and support submission of trade basket to global (GTS) & online (OTS) trading systems along with monitoring total return swaps submission & rejection while notifying investment / PMW support team.
- Understood, modified & categorized the complex requirements for integration & syncing trading functionality of total return swaps with existing infrastructure.
- Modified/Created/Compiled functional specification, readable requirements & iteratively reformed project design of entire TR Swaps & Interest rate derivatives (Swaps & Options) module for derivatives using rational rose UML methodologies like Use Cases, Object & Sequence diagrams & other design concepts for UI layer with a top-down & bottom-up approach.
- Systematic and careful usage of multi-threading and synchronization concepts to update UI data across screens considering SWING strengths & limitations.

Environment: J2SE 1.4.2/1.5, Java SWING, JGoodies Framework, UML using Rational Rose, J2EE, EJB, Hibernate, Weblogic 9.2 / 8.1 SP3 /, Accurev 3.2, XML, JUnit, JDBC 2.x, Oracle 10g, with Eclipse 3.2 using agile programming methodologies.

I-SERVICES INCORPORATED Sept. 2005 – Nov. 2006

Project: NFL Mobile Fantasy Football Video Title: Senior Java, J2ME Consultant
Client: Gotuit Media Corp. Woburn, MA

Project: Substance Abuse Tracking System (SATS) Title: Senior Core / Web Java Consultant
Client: State of Rhode Island - Dept of Corrections Providence, RI

Project: Paint Palette Diagnostic (MatchStik-Toolcrib, P-PDA) Title: Senior Core Java / Swing Developer
Client: X-Rite Inc Boston, MA Grand Rapids-MI

Project: Humana Medicare Simulator (MediSim) Title: Senior Core Java / Swing Developer
Client: Humana Health Belmont, MA

STATE OF KANSAS May 2001 – Sept 2005

Project: Wind Erosion Prediction Systems (WEPS) Title: Computer Info. Specialist/Developer
Client: United State Dept of Agriculture (USDA) Manhattan, KS

Project: Wind Erosion Prediction Systems (WEPS) Title: Senior Java / J2ME Developer
Client: National Science Foundation (NSF) Manhattan, KS

SKILLS:

Languages: Core Java 7, 6, 5, C#, WPF, . NET, PERL 5.14, Python 3 / 2.*, C, C++, Alloy, UML, USE / OCL
Operating Systems: Win 7/Vista/XP/2K/98/95, Unix, Linux, Sun Solaris, Macintosh, Win CE,
Databases: Oracle 11g, Sybase 12.5, DB2 / DPF, MS SQL Server 2008, MySQL, SQL, PL SQL, MS Access.
J2EE Components: RMI, JNDI, JDBC2.x, XML (SAX/DOM APIs), XSLT, Servlets, JSP, EJB1.x/2.x, JMS, JTA.
Java IDE's: IntelliJ 6.x, Eclipse Indigo/Juno, NetBeans 3.x/4.x/5.x, JBuilder3.x, IBM, JCreator,
Adv. Technologies: Spring 3.0, Hibernate, XML, XSLT, DHTML, Servlets, JSP, APACHE-TOMCAT, JavaBeans.
Version Control: CVS, Subversion, Perforce, StarTeam, AccuRev.
Others: Visual Basic 6.0, AWT, SWING (JFC), Rational Rose, MagicDraw UML 7.8, MS Visio, Extreme Prog. TCP/IP, RMI, LDAP, SSL, Junit, TDD, Agile Methodologies, FIX Protocol 4.0 / 4.2 / 4.4 / 5.0

LEADERSHIP:

- President, Indian Students Association (ISA) at Kansas State University.
- Executive Committee Member, International Co-ordinating Council at Kansas State University