Andrew Pandre, Ph.D.

email: pandre@gmail.com   My Blog   CV Online   CV in PDF   CV in Word   LinkedIn Profile

SUMMARY

Experience with different organizations, including large (IBM, Sears), mid-sized (InterSystems, Environmental Systems Research Institute) and start-up companies (GeoTrust, Visionael, LakeView, Segue). Worked as the principal software engineer for IBM (1990-93), as the principal software architect (1994-98), as Software and Data Visualization Director/VP (1999-present) on diverse variety of innovative projects. Before 1990 worked as a Leading Computer Scientist for the Soviet Academy of Science.

QUALIFICATIONS

Excellent Problem Solver, Experienced Data Scientist, Data Visualization Director, Successful Blogger.
Specialties: Data Visualization, Business Intelligence (BI), Software Management and SDLC, ETL, Data Collection.
Data Visualization Expertize: Tableau, Qlikview, Spotfire, Omniscope, PowerPivot, Excel, SSAS, Visual Analytics.
Proven Software Director: requirements to definition - design – development - deployment-production-maintenance-support.
Successful Communicator: proven maintainer of the best relationship with Customers, Sales, Marketing & Support.
Software Designer: requirements, specifications, architecture, dataflow, UI wireframes, Visual Prototypes, QA engineering.

LATEST PROJECTS: Managed the design and development of large projects:

➢ Technical Leader of large Data Visualization Community for Sears (4000+ users, 1300+ interactors, 250+ Tableau Publishers)
➢ Hundreds of Production Data Visualizations (Tableau, Qlikview, Spotfire, SSAS, PowerPivot)
➢ SaaS Visualization of DataCloud with ability to drilldown all Cubes while synchronizing all Dashboards
➢ Multiple data collection, alerting & reporting web applications for GHG and Environment Monitoring (C#, SQL Server).
➢ The monitoring & reporting system for messaging servers & appliances (C#, ASP.NET, SQL Server).

PROFESSIONAL EXPERIENCE (22+ years in software industry, 12+ years of management)

✓ **Data Visualization**, Visual Analytics, Business Intelligence Architecture and Management.
✓ Software Architecture & Quality, Product, People, Team Leadership & Project management, Team building.
✓ Expert Knowledge of the SDLC, Scrum Waterfall, RUP & OOP; UML; source control & defect tracking.
✓ **DB Technologies:** Relational, Columnar, in-Memory DBMS; Replication; OLAP & Multidimensional Cubes
✓ Database replication, file & system cloning, remote boot, application deploy & delivery, disaster recovery.
✓ Product life-cycle experience with replication & load-balancing appliances & enterprise web architectures.
✓ Network Design, Discovery, Validation and Simulation, Virtual LAN modeling and configuration, Cryptography, PKI.
✓ Development of well-known software products, using C# (.NET), C & C++, Subversion, Bugzilla.

PRINCIPAL, Director of Data Visualization, 2012-present, Sears Holdings Corp., http://searsholdings.com/

➢ Oversaw the Data Visualization Architecture and promoted the Best Data Visualization Practices to Sears's users;
➢ Led the growth of Visualization Community from 200+ users to 1300+ active interactors, 250+ Publishers, 3000+ Viewers;
➢ Led Sears's migration from Tableau 7 to Tableau 8;
➢ Authored Data Visualization Blog for Sears's Information Analytics Team (3 practical articles per months);
➢ Designed 600+ Practical Data Visualizations, Charts, Dashboards, Prototypes and Demos, published it in 107+ Tableau workbooks for Sears Analytical Projects and Data Visualization Community;
➢ Managed the Sears's Participation in Tableau's Alpha and Beta Programs;
➢ Started and managed the Data Visualization Group for Analytics Community;
➢ Advised with Data Visualization Design and Architecture for multiple Analytical projects, including:
  • Self-Refreshing Activity Monitoring Dashboards for Information Analytics & Innovation Portal;
  • Visual Reports for Consumer Behavior Frequency Analysis for Shop Your Way Program;
  • Prototyped Visualization of Time Series and Data Transparency for Consumer Data Integration;
  • Dashboards with Trends and Rate of Change Charts for members of Shop Your Way Program;
  • Visual Comparison of Replenishment and Point-Of-Sales Transactional Data Collectors;
  • Developed Financial and Marketing Visual Weekly Summary for Chairman;
  • Optimized Tableau Workbooks and Background Tasks for Targeted Interactions Analytics and Visual Inventories;
  • Created dozens of Data Connections, published on Tableau Server for usage with Operational/Monitoring Dashboards;
  • Improved performance of Operational Dashboards for Teradata-based Data Warehouse;
  • Designed and implemented 30+ near-real-time monitoring Dashboards for Tableau Server and Visualization Community;
  • Optimized Data Extracts, Connections, Data Refreshes and Schedules for Background Tasks for corporate Tableau Server.

VP of Data Visualization, 2009 - 2012, Practical Computer Applications, http://www.practicaldb.com/
* Designed and managed the development of Data Visualizations and BI applications with Tableau, Qlikview, Spotfire, SSAS, Excel.
* Designed Visual Web Analytics (with total drilldown functionality) for Website Visitors Data about website visitors, their uniqueness, sources and identity, duration of visits, stickiness of webpages, pages seen, keywords statistics, etc.

* Designed Interactive and Actionable Visualization of Fragmentation, Compression, Usage, Query Optimization Statistics for all SQL Server Instances and Databases across entire corporate network.
* Developed Motion Charts (Tableau, Qlikview, Google Motion Chart Widget) similar to Hans Rosling's Gapminder/Trendalyzer.
* Visualized (for pre-sales purposes) public databases: Gene Expression Atlas, AdventureWorks2008, Enron Email Archive, etc.
* Designed and led the development of advanced SaaS Visualization of multi-Cube in-memory DataCloud with ability to drill-down any Cube while synchronizing all Dashboards and with Zero-Footprint WebClient.

Director of **Software Development,** 2006 – 2009, Perillon Software, Littleton, MA
➢ Designed and Managed (16+ engineers) multiple Performance Measurement and Management applications for BI, Analytics & Data Visualization for Environmental systems (including Green House Gases & Emission Monitoring), Executive Dashboards for Incidents, Audits, Inspections, Alerts (SpreadsheetWEB, SQL Server, Visual Studio)
  * Architected new Perillon's products: Perillon Dashboards (Qlikview-based) & FasTrak (SpreadsheetWEB).
  * Designed, purchased hardware/software, managed a deployment of Datacenter (80 CPUs, 20 TBs, SaaS).

Director of **Software Development,** 2004 – 06, Intellireach Corp., Dedham MA (bought by Infocrossing):
* Managed the development (30+ engineers) of the complex reporting & monitoring system for large messaging servers appliances; 2 releases of system were delivered on-time (never happened before me).
* Managed the design of advanced messaging platform, including email management, message archiving and reporting products, led software architecture and design, developed UI Wireframes for entire system; helped to build the team.

Director of **Software Development,** 2002 – 2004, *BridgeLine Software Inc., Woburn, MA*
* Designed and Managed (12+ engineers) software, data & replication architecture for distributed Case Management System for federal government, managed R&D (C#, SQL, Natural); migrated databases from Adabas & FoxPro to SQL Server.

Director of **Engineering, 1999 - 2001: GeoTrust** Inc., Wellesley, MA (**acquired by Verisign, Inc**.)
* Built the 15+ engineering & QA team and the software architecture of signing and SSO web services.

Engineering *Manager* & Principal *Architect*, 1998-99: NetSuite, Concord, MA (**acquired by Visionael)**
* Managed Virtual LAN project, with 10+ engineers in VLAN team involved, architected entire VLAN product.

Principal Software *Architect*, 1996 - 98, InterSystems Corporation, Cambridge, MA
* Developed (C++) Active M COM Server for exposing M language to WWW servers & browsers.
* Implemented (C++) COM-based Visual M as Visual Studio Add-In as the client for Caché Object DBMS.

Principal Software *Architect*, 1995 - 96, Praxis, Framingham, MA (**acquired by *LakeView Tech*.**)
* Redesigned and ported **OmniReplicator** (now MIMIX® replicate1™) to Win32 with ODBC support of the heterogeneous, bi-directional, near real-time database replication (Oracle, SQL Server, DB2, Sybase etc.)

Senior Software *Architect*, 1993-94, Environmental Systems Research Institute, Lowell, MA
* Project leader for R&D of AtlasGIS/TerraView mapping SDK for Win32 (best mapping SDK, DDJ 8/93).
* Improving (230%) the speed of the vector graphics engine in TerraView SDK for Win32.

Senior & Principal Software Engineer, 1990-93, International Business Machines (IBM Corp.):
Principal Software Engineer, *1992 - 93, IBM (Rational Software Corp.,* **acquired by IBM**), Lexington, MA
* Designed Image Comparator with superfast image differencing, Improved the precision of the playback for **Rational Robot**

Senior Software Engineer, *1990 - 92, IBM (LOTUS Development Corp.,* **acquired by IBM**), Cambridge, MA
* Implemented CallTree tracing & code profiling for **Lotus 1-2-3**, improved segmentation and performance in low memory.
* Developed the first Image Capturing & Comparison tool for Windows, with quick image differencing.

CONSULTING and BACKGROUND as the Technical Leader and Software Architect.
* Designed Query tools & pLSA-based Indexing, Concept Discovery and Searching framework for huge government document repositories, Proposed & Designed PLSI-based metadata technology, won SBIR Phase I (2006) & II awards (2007).
* Designed the multi-user distributed Case Management System for Federal Government (C#, Webforms, Winforms).
* Designed secure real-time file replication & instant disaster recovery (over LAN and Internet) toolkit (C#, .NET).
* Architected Database Synchronization, implemented the remote measurement of the freshness of data.
* Designed automated remote system cloning & discovery of target system & support of dissimilar hardware.
* Designed unique technology for remote formatting of hard disks over network, copying files between different file systems
* Invented **"Service monitoring and reporting system", US Patent** Application **20020143920**.
* Co-Designed & implemented IBM's Rational Robot for Windows and Borland's QAPartner/SilkTest Extension Kit.
* Implemented the monitoring, automated capture, recording & replay keystrokes, mouse moves.
* mathematical modeling, scientific algorithms, optimization & Monte-Carlo modeling for large systems.
* Automated technologies for memory management, performance tuning, code analysis, software testing.

EDUCATION: *Ph.D. in Computer Science*, MIS Research Institute, Moscow; *MS in Math*, **Moscow University**
CERTIFICATION: Microsoft (**MCP ID #389220**) 1997, Certified Project Manager (BU, 2005), QlikView (Qliktech, 2007).
PERSONAL: US Citizen, held Security Clearance in past. Married, 2 children. Home Connection: FiOS, 35+ Mbps.
33 Excellent references available online: http://apandre.wordpress.com/pandre/33-recommendations/