

James Michael Melott

(713) 742-6089 jmelott@earthlink.net
712 Caplin Street, Houston, Texas 77022

SUMMARY

Professional with over twenty years of experience in software architecture and development and project management with various roles in Internet and Intranet systems, database modeling and design, computational biology, artificial intelligence, GUI development, language design, and software security. Industry experience includes: banking, finance, accounting, medical, education, oil & gas, chemical, energy, trading, engineering and telecommunications. Experienced in all phases of the project life cycles including inception, requirements gathering, design, development, quality assurance, sales, and support. Quickly learn and utilize new languages and methodologies. Experienced in documenting and teaching technical concepts. Excellent communication skills.

TECHNICAL EXPERIENCE

<i>Programming Languages:</i>	Java Visual Basic XFDL Bash/ksh/csh	JavaScript EDI C, C++, Pro*C RPG	SQL PL / SQL CORBA ColdFusion	R ASP HDML Pascal	HTML XML COBOL .NET
<i>Java Specific:</i>	J2EE DeepLearning4j	JSP JavaBeans	Struts JUnit	Servlets Swing	Applets Log4J
<i>Internet Related:</i>	Glassfish Browsers Amazon Cloud Knockout	Netscape Server FTP / SFTP Google Cloud Angular	Weblogic Telnet IIS Node	JRun SOA Wordpress REST	Tomcat .NET CouchDB
<i>Database:</i>	Oracle SQL Developer	SQL Server SQL Loader	MS Access MySQL	ODBC Couch DB	JDBC NoSQL
<i>Dev Env:</i>	Netbeans RStudio	JBuilder Visual Studio	Eclipse	Ant	Maven
<i>Change Mgmt:</i>	Source Safe	Star Team	CVS / PCVS	SVN	Git
<i>Methodologies:</i>	OOAD	SDLC	RUP	Agile	
<i>Various Software Packages:</i>	MS-Word Notepad++ Peoplesoft 5.1	MS-Excel Rational Rose Oracle Forms 4/4.5	MS-Project Visio Oracle Reports 2/2.5	Powerpoint PureEdge Designer	Photoshop
<i>Other:</i>	ERSI MapObjects Cloud Computing	3D Animation Cloud Storage	OpenGL Hadoop	Docker	Big Data
<i>O/S:</i>	UNIX/Linux	Windows 3.1-10			

EDUCATION

BS Computer Science, minor Mathematics, 1989.

McNeese State University, Lake Charles, LA 70609

PROFESSIONAL EXPERIENCE:

University of Texas MD Anderson Cancer Center Senior Systems Analyst May 2011 – Present

- Created PathwaysWeb, a REST-like web service that provides a gene pathways API with directional interactions, expanded gene ontology, and versioning, integrating scientific data from multiple online databases.
- Created R package for calculating protein concentrations from measurements of Reverse Phase Protein Arrays.
- Authored over 1000 test cases for multiple scientific applications and assisted in additional manual testing.
- Created prototype UI for use in a cloud application for creating Next Generation Clustered Heat Maps.
- Assisted with development and testing of multiple scientific projects in Java, R, JavaScript, HTML, and XML.
- Designed and implemented database schema for web service backend using Oracle.
- Created scripts and applications in Java and R for creating large sets of test data for testing other applications.
- Assisted in creation, improvement, and standardization of toolbox of web-based scientific data visualizations.
- Published first author of article in Bioinformatics journal: 2016, 32(2):312-314 and coauthor on several others.
- Combined and organized data from multiple external resources to assist in research of potential cancer drug effectiveness with respect to genomic mutations.

Melott Enterprises Owner Nov 1993 - Present

- Created and published 51 bilingual books in 52 different languages.
- Created graphical images, scripts, and 3D objects for the Second Life Virtual world for charity and for profit.
- Consulted for non-profit corporations such as The Volunteer Center, providing technical support and training.
- Created software to allow retrieval of parcel information from map based UI for use in real estate investment.
- Implemented software to collect over 2 GB of trading information for over 7600 stocks and other investment vehicles for use in investment research.

National Oilwell-Varco (via ROI Staffing) Senior Consultant Oct 2010 – May 2011

- Updated multi-threaded real-time Java applications running on on custom Unix-based platforms used for controlling multimillion dollar robots used in on-shore and off-shore oil exploration and drilling.
- Tested applicatons, servlets, and applets used in real-time control of oil drilling processes.
- Assisted new workers in basics of current production system and codebase, Java, Java IDE's, and Linux.
- Reviewed several Java real-time virtual machines as possible replacements for existing system.

NRG Energy (via Talon Professional Services) Energy Trading Developer Nov 2009 – Oct 2010

- Created programs in Java for data mining data repositories of thousands of files containing multiple TB of data from various Internet-based resources such as NOAA/NCDC and processing them to gather over 7 million records of information used to enable energy traders to make informed trading decisions in ERCOT market.
- Created Ant files to generate Java classes from WSDL for CAISO energy trading market.
- Maintained multiple web pages in various languages such as ColdFusion, Java, and ASP.
- Performed database administration functions including migrating a 354 GB database between servers.
- Developed intranet-based software to document multiple database schemas of hundreds of tables and present documentation to developers on intranet development website.
- Reviewed large sets of code on multiple servers of differing platforms and orchestrated creation of production Disaster Recovery site including code and configuration changes and testing of new systems.

JPMorgan Chase (via Cognizant Technology Solutions) Architect, Manager Level Jan 2009 – Aug 2009

- Participated as Subject Matter Expert in a multi-year project to migrate an existing system to a new platform.
- Trained other developers unfamiliar with existing system and assisting them in making modifications to system.
- Assisted Quality Assurance and User Acceptance teams in devising proper testing procedures for system.
- Managed enhancements to existing legacy system for needed business enhancements as well as for enhancements of functionality to support migration to new system based on PEGA Systems design.
- Documented existing legacy system and interface specifications into it from new system.

JPMorgan Chase (via Perficient, Inc.) Consultant Nov 2001 - Jan 2009

MCI Systemhouse **Sr. Software Engineer / Project Manager** **Apr 1996 - May 1997**

- Managed a team of over 10 people and associated resources to create an Oracle Forms-based pricing application consisting of various reports, Oracle stored procedures, and over 60 Forms in a two month time period.
- Instructed team members in use of Oracle applications including Oracle Forms and Reports.
- Designed and implemented tool to allow user to define custom data retrieval, transfer, and storage between various databases and software APIs.
- Implemented and optimized real-time application to perform software integration between multi-platform, multi language, multi-application software for use in automated EAI and data warehousing.
- Authored program and database design documentation and marketing materials for software integration product.
- Ported over 30,000 line Access application to Visual Basic.

BePOS/Bechtel Engineering **Consultant** **Jun 1995 - Oct 1995**

- Created C++ client and server software to interface UNIX based Oracle database with Visual Basic client-side application to manage all aspects of multi-billion dollar engineering projects.
- Implemented Visual Basic code to provide user interface for enterprise-wide project management system.
- Refactored standard code compilation procedures that resulted in decrease of app. size from 23M to 12M.
- Designed and implemented server for management of project-wide global variables stored in Oracle 7+ DB.
- Authored software and database design documentation for low-level class dictionary API.

KPMG Peat Marwick **Consultant** **Oct 1993 - Oct 1994**

- Designed multi-user LAN-based accounting application for cable television provider using Oracle 7, Oracle Forms 4.0 and Oracle Reports 2.0.
- Designed and implemented prototype accounting program using Visual C++ and the MFC libraries and Access.
- Designed Oracle database model for tracking contracts, formulas, and account data for a nationwide cable company with over 400,000 customers.
- Performed reviews of hardware, software and security procedures of multi-million dollar oil and gas companies including Murphy Oil Corporation.
- Interviewed potential candidates for technical and management positions.
- Authored over 400 pages of software design documentation.

Dataseek, Inc. **MultiMedia Software Engineer** **Dec 1990 - Oct 1993**

- Developed multimedia system combining text, graphics, sound, and full motion video in a LAN environment.
- Designed and implemented Windows-like, object-oriented authoring tools for creation of information kiosks.
- Implemented imaging software for real-time capture, digitization, and processing of color photographs.
- Constructed applications used by Novell (NetWorld 92) to demonstrate capabilities of Novell Netware 3.11.
- Created automated telecommunications software to update nation-wide WAN multimedia information system.
- Aided in enhancements to leading-edge online system used by Halliburton Geophysical to sell oil field data.
- Created custom software used by Oil & Gas Journal to sell advertising space in their publication.
- Authored over 250 pages of software documentation.

Various **Contract Programmer** **Sep 1989 - Dec 1990**

- Developed software for seismic, geographical, and engineering data systems in BASIC, C, and FORTRAN.
- Digitized and performed quality assurance of various Oil Field data including base maps, well logs, and velocity panels.