

## DAVID K. SCOTT

San Francisco Bay Area  
San Francisco, CA 94107  
415.462.0356  
resume online at <http://www.autohandle.com/davidScott/>

### Summary:

Diversified experience in software engineering, programming, life science bioinformatics, and project management. Early adopter of technology:

Java - ten years of commercial Java/Swing/AWT/JDBC/Oracle experience.

OO - ten years of C++/X/RDBMS experience.

UNIX - fifteen years of UNIX, including BSD and Solaris.

Application expertise includes automation, material handling systems, and bioinformatics. Strong analytical, problem-solving and software development skills.

### Experience:

#### *Java Contractor*

#### *Pathwork Diagnostics*

2009 Finished a server side multi-threaded program in the Affymetrix DX2 tissue of origin pipeline using the java concurrency package.

#### *Argon ST - Radix*

2009 Developed Java Swing UI with custom Swing widgets for intercepting cell phone conversations.

#### *Automated Handling Systems Inc.*

2006-2008 Developed grid based gene search engine based on the NIH Blast program using Eclipse, JCP, Java Swing and Java servlets.

#### *Merriman Curhan Ford & Co.*

2007 Restored trading application built by RateXchange by converting application to Eclipse.

#### *Celera Diagnostics*

2006 Commercialized in-house swing based genotyping software prototyped by the research and development department by using Eclipse plug-ins with RCP, SWT, and Swing.

#### *Ingenuity*

2005 Built custom Swing components for their cell pathway exploration tool including: animated menus and internal frames that could be dropped on desktop.

#### *Genencor*

2004 Wrote graphical sequence editor plug-in to edit amino acids, nucleotides, and sequence features using biojava, java2d, and swing.

## *Java Contractor*

### *Brilliant Media*

2002 Used JBuilder7, Weblogic, and Oracle8 to build a J2EE/CMP application framework for Brilliant's flagship product: PowerView. The framework extended the swing pluggable UI and used Java2D to create the unique look and feel required by the product, including such custom features as transparent menus and components that opened with a wipe.

### *RateXchange*

2000-2001 Used Java 1.3/Swing to create an applet/application user interface for brokering bandwidth in a B2B online application.

### *Incyte Genomics*

1998-2000 Applied skills from Stanford Bioinformatics program to develop signed Java applets, applications, and custom components delivered to Incyte customers to mine genomic data. The Java 1.02/1.1/1.2 programs used AWT and Swing for viewing, editing, and annotating biological sequences; and viewing and clustering microarray data.

### *Brilliant Media*

1997 Developed a Java/AWT/JDBC/Oracle application for Warner Brother's board room to use in planning the release of movies. The application display is a framework of custom lightweight Java components with a look and feel tailored for executives. Developed on Sun, ported to NT and Win95.

### *McKesson Corporation*

1996 Completed a Java/AWT/JDBC/Oracle data display prototype for McKesson's next generation pharmacy analysis system. The program included non-standard interactive widgets for splitting the display window.

## *Technical Project Manager System Analyst Programmer*

### *Automated Handling Systems, Inc.*

1995-1996 Developed tools for an on-line trade magazine system in Java. The first tool was a MacDraw like program which will allow authors to create clickable images to be inserted in the magazine pages.

1990-1994 Architected the concept and design of a new software product, ExamFolder program. Written in C++, X, and INGRES SQL on Sun UNIX workstations; ExamFolder is a state of the art multimedia client/server document management and imaging application for the paperwork, videos, and x-rays documenting large cargo containers. I successfully directed the 6-8 person team that developed the software, maintained the UNIX system, installed the Sun hardware and software at the end-user site, integrated the system with the other vendor's PC hardware and software, and operated and maintained the system for the facility owner.

*Technical Project Manager Marine Terminal Computer Systems, Inc.*

*System Analyst*

*Programmer*

1986-1990 Directed the sole outsource computer group for CMT Systems, a Bechtel/CMT startup. The startup specialized in automated material handling systems for break-bulk marine cargo. I interfaced to the startup owners, facility operating contractors, and assembled and directed the dedicated MTCS staff that grew to over 30 people. I directed the entire staff which provided system integration for the complete startup business including: computer implementation schedules, requirements, specifications, fixed priced software estimates, software development, integration, training and required staffing levels for various projects worldwide. To meet long term startup objectives; I successfully transitioned the staff to C++, object oriented development, and CASE tools.

1981-1986 Directed a nine person implementation group that designed and installed a fully automated, US\$23,500,000 material handling computer system for the US Steel Corporation in Fairfield, Alabama. The system took three years to build and was demonstrated to the customer at the end of 1984. After the demonstration, the customer contracted for an additional year of enhancements to the system. The contract was finished in October of 1985. The system is the only fully automated system of its type and includes a unique transaction based architecture that allows the system to easily migrate from the UNIX development environment to a DEC VMS production environment. In addition to managing the group; I designed, coded, and implemented the transaction architecture on both platforms. The architecture resulted in a USENIX paper.

*Senior Project Engineer  
Industrial Engineering*

*Matson Navigation Company*

1977-1981 Directed a team that designed and coded an innovative color graphics planning system, the first of its type in the marine industry. Designed and coded the prototype of the system that demonstrated the feasibility of the planning approach to senior company management. This graphical planning system was the first successful effort to supplant a highly efficient paper system that had been in use for decades. This systems approach has since been cloned at other marine terminals and industrial facilities.

Key member in the installation of the Matson overhead material handling system, a semi-automated material handling system for marine containers. The system was installed at the Port of Long Beach and the Port of Richmond. Duties included: debugging computer software in the field, training three shifts of longshoremen crane operators to control the overhead cranes, training office personnel to operate the computer system, and debugging machine communications in a complex multi-vendor digital radio system.

*Engineer  
with Security Clearance*

*Lockheed Electronics Company*

1975-1977 Contractor to NASA at the Space Flight Center in Houston. Assigned to the mission support group responsible for the space shuttle's remote manipulator arm. Designed and implemented an interactive computer program which, based on user commands, provided a real-time graphic display of the shuttle's robot arm. The program was used as a prototyping testbed to determine feasible preprogrammed arm motions during a space mission.

## EDUCATION:

Certificate in Bioinformatics, Stanford University  
M.S. Industrial Engineering, University of Alabama  
B.S. Electrical Engineering, Tulane University of Louisiana

## PUBLICATIONS:

Scott, David, ExamFolder, Technology Integrator, International Symposium on Optics, Imaging and Instrumentation, SPIE, The International Society for Optical Engineering, San Diego, July 1994.

Scott, David and Eric R. Helthall, ExamFolder System Integration Architecture, Contraband and Cargo Inspection Technology International Symposium, sponsored by the Office of National Drug Control Policy and the National Institute of Justice, October 1992.

Hydar, Dan, David Scott, Felix Yang, Morris Yeh, A Transaction Processing Monitor, UNIX Transaction Processing Workshop, USENIX, Pittsburgh, PA, May, 1989.

Meade, Gary and David Scott, Landside Information Control, 4th Terminal Operations Conference, Cargo Systems, RAI Congress Center, Amsterdam, October, 1986.

Liu, Ted, David Scott, Hal Romanowitz, Russ Innes, Don Chin, An In-Process Storage System Case Study, Proceedings of the IEEE National Conference on Robotics and Automation, April 1986.

Wasacz, M.S., G.A. Meade, D.K. Scott, Terminal Control System, 2nd Terminal Operations Conference, Cargo Systems, RAI Congress Center, Amsterdam, June 1980.

Chen, Der-San and David K. Scott, A Loading Model for a Container Ship, ORSA/TIMS Joint National Conference, November 1978.