

Bob Forgey

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Applicable Job Skills

- Embedded systems development (C, C++, Assembly, 80x86, M68K)
- Automated testing of embedded systems products
- Object-Oriented analysis and design
- Build/Configuration management (CVS, Subversion, Make)
- Unix programming experience (Perl, Tcl/Tk, C, C++, Python)
- Internet development experience (Perl, Apache, XML)
- Linux/Solaris system administration

Work Experience

CCAD LLC. (www.ccadllc.com)

San Diego, California

Jan 2005 – Present

Contract Engineer. Upgraded existing build system to make it more efficient. Created resource and performance monitoring systems.

Enhanced and maintained several subsystems, including two-way communications and code download. Created and implemented a system for the automated testing of the product.

Nokia Inc.

San Diego, California

Apr 2002 – Dec 2004

Contract Engineer. Created and supported software product to allow developers to use testing tools while debugging under simulation instead of requiring the use of target hardware.

Enhanced the functionality of an automated testing tool with low-level communication routines.

Bioinformatics consulting work

San Diego, California

Dec 2001 – Apr 2002

Created, designed, and implemented perl scripts to process bioinformatics data files (PDB and Dali) and to process the results of related programs (CE and Sequoia).

SSP Solutions

Irvine, California

Nov 2000 – Nov 2001

Sr Developer. Implemented website using an XML application server (AxKit). Designed and implemented content administration system for company website. Created website in PHP on a Linux platform.

Developed test applications for Embassy Trusted Client API. Test applications written in Tcl and C. Built and administered network of Linux and Windows 2000 platforms.

Motorola Corporation

San Diego, California

Jan 2000 – Nov 2000

Contract Engineer. Designed, implemented and tested functionality which provided real-time code upgrade of a satellite TV set-top box without interruption to the end user.

Performed code reduction effort to remove dead code from product using Perl scripts.

Qualcomm Inc.

San Diego, California

Sep 1997 – Jan 2000

Contract Engineer. Designed, implemented and tested messaging and control protocol for High Availability processing for redundant cards in satellite telephone gateways.

In charge of maintenance of command and data messaging system in gateways, including change control and configuration management. Wrote scripts to generate Interface Control Document web pages for this system.

Performed UNIX system administration. Developed tools and CGI scripts for administration work. Set up web pages to provide a centralized information source. Installed web-based problem reporting system and group calendar. Built Solaris Jumpstart CDs for installing production software, and set up this system to run from a version-controlled ClearCase repository.

Palomar Products

Carlsbad, California

Sep 1996 – Sep 1997

Contract Engineer. Designed and implemented user interface features on X-windows voice switch GUI for air traffic controllers. Participated in OOAD requirements analysis, design, and testing. Built a Tcl/Tk application simulator. Set up a system to build application on NT that included a facility to detect build errors and automatically alert developers.

General Instruments

San Diego, California

Feb 1995 – Aug 1996

Contract Engineer. Implemented channel selection algorithm used to determine user authorization for a satellite set-top box. Algorithm extracted authorization information from Entitlement Management Messages (EMM) in an MPEG2 Packetized Elementary Stream. Designed, implemented and documented build management system for set-top firmware.

Teradata/AT&T/NCR Corp.

San Diego, California

Feb 1990 – Jan 1995

Consulting Engineer. Designed and implemented low-level HW to SW interface classes for embedded diagnostic processors for a large-scale parallel computer. Provided C++ and embedded systems technical support for the group. Designed, implemented and documented build management system using Make and Perl for a group of about 20 engineers. Performed requirement analysis and technology evaluations for adding an OOAD tool into an integrated development environment for C/C++.

Speech Systems, Inc.

Tarzana, California

Feb 1984 – Dec 1989

Software Engineer. Embedded development in C and 80186 assembly for speech recognition device. Designed and implemented control firmware for custom board. Designed and implemented firmware to transfer speech data from the custom board to a backend processor.

Education

California Institute of Technology

BS Chemistry 1977

California Institute of Technology

BS Electrical Engineering 1978

University of California Extension (San Diego)

Java Programming

Intermediate Java Programming

Tools and Algorithms in Bioinformatics

Platforms

- **HARDWARE:** Solaris, Windows XP, Linux; VxWorks, VRTX, pSOS; 80x86, 68K
- **SOFTWARE:** Unix, Windows XP, C++, C, 68K/80x86 Assembly, Tcl, Tk, Python, Perl
- **APPLICATIONS:** ClearCase, Continuum, CVS, Subversion, Tornado, Apache, XML