# David Mayer

San Jose, CA 95129                                                      (408)249-7578

davemayer@domaint.com                                    linkedin.com/in/DMayerFirmware

**Objective**    Senior Firmware Engineer/Analyst/Designer

## Introduction

The terms "embedded software" and "firmware" are often used interchangeably, but embedded software is usually associated with devices that contain significant graphics operating systems and languages with large object libraries (e.g., Windows CE, Embedded Linux, Embedded Java); whereas firmware is usually associated with small-to-medium sized devices that do not have a sophisticated GUI OS. Firmware usually implies that the software engineers are hardware-savvy. Firmware does often include a real-time operating system, but can be designed with no OS at all. My interest in firmware engineering grew out of my previous 10 years experience as a senior engineering electronics technician (at Apple Computer, NASA-Ames Research Center, Memorex, and other companies not listed in this resume).

## Summary of Firmware Experience

Over 20 years, ranging from maintenance programming to requirements analysis/specification. Work well in a team or independently. Can communicate effectively with non-software departments, such as marketing, other engineering (electrical, mechanical, etc.), manufacturing, and other company personnel. Skilled at writing formal documentation required for government audit.

## Education

BS Computer Science, CSU San Jose, 1991

## Experience

Job Seeker

*PROMATCH, Sunnyvale, California*                                    *2017-2018*

ProMatch is an interactive career resource center for professionals who are seeking work in the greater San Francisco Bay Area. ProMatch is sponsored by the California Employment Development Department (EDD) and the NOVA Workforce Investment Board. It is part of the NOVA Job Center, which provides a full array of employment and career services.

• Member of the Tech Services (TS) team.
• Rose to the level of "Co-Lead", facilitating TS workshops, TS team meetings, and TS Co-Lead meetings.
• Performed many basic TS roles, including Videographer, Video Duplicator, Computer Support, and others.
• Mentored many new TS members.

**References** (ProMatch staff):   Bob Withers, Connie Brock, Rosie Morales
                                                408-730-7671 (closed Mon 11:30-12:00 and Thu 9:30-12:00)

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Firmware Consultant/Manager/Engineer/Analyst/Designer

*DOMAIN TECHNOLOGY, San Jose, California*                                                    *1997-2016*

• Directed all phases of firmware engineering process for client Adeza Biomedical, including software requirements analysis and design description.

• Managed several firmware engineers who implemented my design descriptions.

• Liaised with outside testing firm to arrange independent system testing to comply with government auditor protocols.

• Evaluated existing firmware for client Summit Analyzers' smog analyzer, using equipment such as a cross-compiler, in-circuit emulator and EPROM burner.

• Developed printing capabilities for exhaust gas analyzer.


*EMBEDDED SYSTEMS DESIGN, Alameda, California*                                       *1993-1997*

• Managed client consulting projects.

• Developed firmware applications and device drivers for Bridge Analyzers' automotive exhaust gas analyzer.

• Modified firmware at Versatron (a military contractor) used in the Skyball gimbal-mounted camera subsystem (the payload for the Predator drone), redesigning existing firmware to accommodate new infrared camera operation.

• Gained valuable object-oriented architecture skills while executing firmware application and device driver projects for Summit Analyzers.

• Developed data processing object with plug and play numerical analysis filters using C++ and created library of standard filter templates for data processing as well as system logger object for higher-level error handling and host notification.

• Created firmware applications and device drivers for Machina voice recorder.

• Redesigned firmware and created technical documentation for AMO / Humphrey.


Firmware Programmer/Analyst

*BIOCIRCUITS, Burlingame & Sunnyvale, California*                                         *1991-1993*

• Initially joined team on a part-time basis to maintain and modify PC software used to control the test bench used by chemists during the chemistry development.

• Subsequently came onboard full time to develop the firmware for the instrument that performed the test bench functionality in instrument form.