

# David W. Deley

## SOFTWARE ENGINEER

### More Than 20 Years of Experience

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## TECHNICAL SKILLS

**Languages:** C#, VB.NET, JavaScript, SQL, Java, C, C++, Assembly Language

**Website Languages:** HTML, CSS, JavaScript, PHP, XML, JSON, JQuery

**Frameworks:** Microsoft .NET, ASP.NET

**IDEs:** Visual Studio, Eclipse

**Operating Systems:** Windows, Linux, VMS, Code Red, FreeRTOS

Solid understanding of Object Oriented Programming (**OOP**), Object Oriented Analysis and Design (**OOAD**), the **SOLID** and **DRY** principles of good programming practice, Design Patterns, and the Software Development Life Cycle (**SDLC**).

## EDUCATION

**M.S. Electrical and Computer Engineering.** University of California, Santa Barbara

**B.S. Mechanical and Environmental Engineering.** University of California, Santa Barbara  
**Pi Tau Sigma, Mechanical Engineering Honor Society**

## PROFESSIONAL EXPERIENCE

### **SOFTWARE ENGINEER**

**2011 – Present**

#### **CONSULTANT / RESEARCHER**

Offering expert knowledge in all phases of the software development life cycle. Authored 2 technical books. Converted numerous books to Kindle and EPUB format. Hand coded personal website (581 pages).

### **SYSTEMS ANALYST / SOFTWARE ENGINEER**

**2015**

#### **COUNTY OF SANTA BARBARA, M.I.S. DEPARTMENT**

System Analyst in the Department of Alcohol, Drug and Mental Health Services

- Reviewed system performance and made recommendations to optimize service delivery and efficiency.
- Refactored legacy code to OOP design patterns, optimized SQL queries and created Crystal reports.

### **SOFTWARE AND ELECTRICAL ENGINEER**

**2013-2014**

#### **SANTA BARBARA CONTROL SYSTEMS**

Embedded Systems Software and Hardware Engineer

- Worked on Embedded system: (FreeRTOS, C code, I<sup>2</sup>C, UART, USB, Op-Amps, isolated power supplies)
- Improved electrical designs for sensor probe inputs and multiplexing circuit.
- Wrote ChemComIII user program in C# and VB.Net using Visual Studio that enabled users to access and control Chemtrol controllers remotely.
- Designed and built testing device for keypad.

### **WEBSITE DEVELOPER (CONTRACT)**

**2012-2013**

#### **SANTA BARBARA BANK & TRUST**

Updated company website during the acquisition by Union Bank.

### **SOFTWARE DEVELOPER / CHIEF EDITOR**

**2000-2011**

#### **MULTI-EDIT SOFTWARE, INC.**

Completed code development for text and code editor. Identified bugs, optimized spell checker, added Unicode support, produced extensive documentation. Chief Editor for Multi-Edit 2006 User's Manual.

## **VMS SYSTEMS PROGRAMMER**

**1992-2000**

### **APPLIED MAGNETICS CORPORATION, THIN FILM DIVISION**

- Systems Programmer for manufacturing execution software applications.
- Wrote, maintained and upgraded database program for tracking wafer defects.
- Wrote programs to assist system manager in maintenance of VAX/VMS and Alpha/VMS computers.
- Assessed computing needs and assisted in purchase of a VAX 6300 mainframe to enhance network.

Early Career, Prior to 1992:

### **VMS Systems Programmer / Technical Staff, Secret Security Clearance General Research Corporation, Applied Sciences Division**

Quickly became a top programmer recognized for outstanding contributions.

## **PROFESSIONAL MEMBERSHIP**

IEEE — Institute of Electrical and Electronics Engineers  
IEEE Computer Society

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## **R&D / INNOVATION • CONSULTING • IT SUPPORT • DOCUMENTATION**

**Strong Background in Electrical Engineering and Computer Programming  
Practical Knowledge in Embedded Systems**

**Results-driven engineer, proactive in anticipating needs and solving problems, while  
working independently under deadlines— track record of job ownership and contributions  
throughout entire career, resulting in high recognition.**

### *Areas of Expertise*

- CMOS / TTL
  - Requirements Gathering
  - Website Management
  - Advanced Network Technology
  - Multiplatform IT Experience
  - Coding / Testing / Debugging
  - Cross-Team Collaboration
  - Programming Best Practices
  - Systems Analyst
  - Increasing System Efficiency
  - Elevating User Experience
  - Quality Assurance
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### **• Extensive Independent Research – Published Writer, 5-Star Rating**

"Advanced Kindle & EPUB Formatting" and "Brief Introduction to Unicode" available on Amazon.com  
Research papers available at <http://www.daviddeley.com/>

- The Pentium Division Flaw
- Page Faults and Array Addressing
- How Command Line Parameters Are Parsed
- How Computers Generate Random Numbers
- How Cyclic Redundancy Codes Work
- Controlling the Inverted Pendulum

### **• University of California Santa Barbara, Institute For Collaborative Biotechnologies**

In collaboration with Sansum Diabetes Research Institute, designed and coded Artificial Pancreas System for type 1 diabetics, connecting insulin pump with continuous glucose monitor via software feedback loop.

**Excellent References – Resilient Nature – Passion For Technology**