

David W. Deley

SOFTWARE ENGINEER / ELECTRICAL ENGINEER / MECHANICAL ENGINEER

More Than 20 Years of Experience

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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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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

TECHNICAL SKILLS

Languages: C#, VB.NET, Java, C, C++, Assembly Language, SQL, Perl, Python

Websites: HTML, CSS, JavaScript, PHP, XML, JSON, JQuery

IDEs: Visual Studio, Eclipse, Android Studio

Platforms: Windows, Linux, Google Android, Microsoft.NET Framework, FreeRTOS

PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEER

CONSULTANT / RESEARCHER

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

Representative Projects and Experience:

- **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.

SENIOR SOFTWARE ENGINEER II
RAYTHEON TECHNOLOGIES

2017-Present

Various Government Defense Projects

- DoD class Secret security clearance.

SYSTEMS ANALYST / SOFTWARE ENGINEER
COUNTY OF SANTA BARBARA, M.I.S. DEPARTMENT

2015

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
SANTA BARBARA CONTROL SYSTEMS

2013-2014

Embedded Systems Software and Hardware Engineer

- Worked on Embedded system: (FreeRTOS, C code, I²C, 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)
SANTA BARBARA BANK & TRUST

2012-2013

Updated company website during the acquisition by Union Bank.

SOFTWARE DEVELOPER / CHIEF EDITOR
MULTI-EDIT SOFTWARE, INC.

2000-2011

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
APPLIED MAGNETICS CORPORATION, THIN FILM DIVISION

1992-2000

- 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