

## Experience

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### Hewlett Packard Enterprise

San Jose, CA

Vice President Engineering, Hewlett Packard Labs

Nov 2019 - present

- **Management:** Team of program managers and strategist to support research programs & projects.
- **Artificial Intelligence Lab:** Led the development of the Artificial Intelligence Lab shift to Trustworthy AI focus.
- **Governance Process:** Developed a formal process to better identify potential disruptive research projects & manage existing programs.
- **Information Repository:** Shifted from a manual documentation process to an automated and self-service BI based system.
- **Internal Advisory Board:** Established an internal business & technical advisory board to increase executive level business unit awareness of research activities.

VP & Chief Technologist, Software Defined Cloud Business Group

Mar 2014 - Oct 2019

- **Landscape Charts:** ....
- **Pathfinder Investments:** Platform9
- **Acquisitions:** Simplivity, QuattroNetworks, Plexxi
- **Cloud Brokkering:** ...
- **HyperConverged:** Drove the acquisition of Simplivity to

### VMware

Palo Alto, CA

Chief Architect

Jan 2012 - Mar 2015

- **Management:** 30 person Platform Security Engineering & 500 person Global Quality Engineering teams.
- **Business Development:** Options for applying virtualization into the automotive, IoT, industrial and entertainment markets.
- **Secure Thin Hypervisor:** Bare metal hypervisor in support of Cloud Native Application development and secure management of servers.
- **Security Response Center:** engineers, tools & processes to reduce likelihood of vulnerabilities in products and their impact to customers.
- **CVSS for Virtualization:** Revised scoring system to take into account virtualization. Resulted in more security PRs being fixed.
- **Security Score Cards:** Engineering wide, consistent model to measure individual products against a common set of security objectives.
- **Security Education/Training:** Implemented world-wide engineering formal & informal training programs for 5,000 engineers.
- **Capital Savings:** Company wide infrastructure inventory and reservation system that eliminated \$5M/year capital expense.
- **Predictive Analytics:** Tools that improved testing estimations, eliminated duplicative & identified testing gaps.
- **CQE Alignment:** Realigned System & Functional QA to development teams that improved production, increase collaboration & decrease duplication.

Chief Technology Officer for World Wide Public Sector, Office of the CTO

Sep 2008 - Dec 2011

- **Business Growth:** Evangelism contributed to growing the US Federal business from \$50M to \$500M.
- **Cloud Computing:** Member of National Institute of Standards effort to develop SP-500 series.
- **IPv6:** Drove the prioritized implementation of IPv6 in products to meet US Federal requirements.
- **High Assurance Platform:** Moved the multi-level security domain system product from a customized hypervisor to a commercial version of VMware Workstation, including federal security assurance requirements.
- **Secure Hypervisor:** Led the development of a prototype of a highly secure bare metal client hypervisor. Client platform leveraged functionalities, scalability and stability of ESX while preserving device compatibility of a legacy desktop system

Director of Software Engineering

Nov 2004 - Sep 2008

- **Management:** 70 person world-wide engineering organization that worked with OEMs and IHVs to support VMware products.
- **Partner Support:** Created a 3-tiered OEM & ISV support model that increased coverage of partners.
- **Certification Suite:** Automated testing suite that increased qualified servers and storage arrays from 20 to over 2000 and 5 to 200 respectfully.
- **Hardware Compatability List:** Transitioned from a set of static documents to a real-time, database driven, public facing searchable web site that increased customer satisfaction and reduced workload of the documentation team.
- **Tier 1 Operating System:** Established VMware as a preferred o/s at all major system OEM that increase revenue for new systems or vSphere versions.
- **Security Certifications:** Sucessfully achieved Common Criteria EAL 4 and FIP-140-2 cryptographic library certifications for VMware products.

## SQU Systems

Software Consultant

Palo Alto, CA

Sep 2001 - Nov 2002

Early stage startup working on “Software Hot Swapping” technology to patch and replace sections of a running operating systems.

## Home Business Magazine

Freelance Writer & Technical Editor

Mountain View, CA

Apr 2001 – Jul 2004

Developed a book on building home networks. As editor wrote & reviewed articles on technology targeted towards the home business market. Magazine had a circulation of 65K newsstand copies and 22K paid subscribers.

## Compaq Computer Corporation

Director Software Engineering, Advanced Technologies Group

Palo Alto, CA

Jan 1998 - Sep 2001

- **Management:** 20-person, multi-location engineering organization within the corporate research organization
- **NT-Atom:** Delivered two major and serveral minor releases of the NT-Atom Binary Instrumentation and Analysis Framework Application product.
- **Digital Continious Profiling Infrastructure:** Developed image manipulation library for Windows NT, both Intel and Alpha architectures.
- **Dynamic Optimizer:** A prototype dynamic optimization system for TRU64 Unix and Windows NT/Alpha
- **Post-link Static Optimizer Environment:** A Linux integrated performance & analysis tool development environment for Linux.
- **Hardware Adaptable Images:** Dynamic binary modification of executables based upon available hardware.

## Digital Equipment Corporation

Senior Software Engineering Manager

Palo Alto, CA

Jan 1990 - May 1998

- **Management:** Managed multiple groups of 40 to 80 software engineers located in Palo Alto, CA, Irvine, CA, Bellevue, WA, and Littleton, MA.
- **Database Compentency Center:** Managed a team of database & performance software engineers that worked with the major database vendors to achieve leadership TCP Benchmark results.
- **Windows NT Compentency Center:** Managed a team of software engineers embeded within Microsoft to support the development of applications on the Windows NT for Alpha platform.

## Principal Software Engineer

Mar 1983 - Jan 1986

- **Alpha Architecture:** Drove the adoption and implementation of adding byte and word operations back in the Alpha Architecture.
- **Fat Binaries:** Invented a method to allow for optimization and execution of applications for different generations of instruction set architectures. Drove implemented on Windows NT/Alpha that resulted in up to 50% application performance improvement.
- **EPA GIS System Integration Program:** Led a 10 person team in developing all technical deliverables for the RFP, Live Test Demonstration and contract modifications for the successful \$140 million contract win.
- **CHAMPVA:** Lead software developer of the claims processing system for the Civilian Health & Medical Program of the Department of Veterans Affairs. Developed several device drivers, imaging scanning software and installation subsystem.
- **NASA Space Station:** Designed the Integration, Test, Verification and Execution and Avionics Development Facility computer system for RFP and subsequent award. Built prototype interface module for communicating with the multitude of communication busses on the simulator. Code was written in a mixture of ADA, FORTRAN, C and VAX assembler.

## Hardware Engineer

Jun 1983 - Aug 1986

- **Information Transport System Decision Support System:** Lead engineer that developed a prototype multimedia workstation. Developed the calendar subsystem, security system (hardware and software), graphics subsystem and applications library.
- **VAXLab User Management System:** Software for automating the management of VAX/VMS systems.
- **Laboratory Information Management Systems:** Developed the software and API library set for graphing data from various laboratory instruments in real-time.

## United States Navy

Naval Reserve Officer

Various

Sep 1985 - Dec 2016

Led organizations from 25 to 1000+ personnel across multiple disciplines including surface operations, communications, computer technology, intelligence and security. Commanded 7 different units. Served on active duty from Aug 1986 to Mar 1990, Dec 2002 to Nov 2004

## Education

### Joint Staff College at National Defense University

Jun 2004

Diploma (Master of Arts equivalent) in Operational Planning

### United States Naval War College

Jun 1998

Diploma (Master of Arts equivalent) in Defense and Strategic Studies

### Northeastern University

Jun 1986

Bachelor of Science in Electrical and Computer Engineering

## Volunteer Efforts

**Languages:** Python, C++, SQL, Shell Scripting

**Technologies:** Linux, VMware, Docker, ELK, Grafana, pfSense, TrueNAS, AWS, GCE

## Skills

**Languages:** Python, C++, SQL, Shell Scripting

**Technologies:** Linux, VMware, Docker, ELK, Grafana, pfSense, TrueNAS, AWS, GCE