



David B. Tuttle

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<http://DavidsGallery.info/Viewpoint>

SUMMARY OF QUALIFICATIONS

Extensive experience with technology design, development and successful product delivery in a wide range of companies and target markets. Concepts, architecture, system design and extensive hands-on development of operating system software, I/O interfaces, local and wide-area networking, local and distributed file systems.

Experienced in platform development for board-level, standalone, interdependent and/or clustered environments, single core and multicore and heterogeneous SoC processors. Proven ability to quickly understand and effectively exploit current and emerging technologies in both hardware and software. "Been there; done that -- Enjoyed it."

Avigilon Inc.
Somerville, Mass.
www.Avigilon.com

Principal Engineer
Apr. 2015 – Dec. 2016

- Yocto embedded Linux platform support for Avigilon ES multi-channel HD video servers. Intel BayTrail dual-core x86_64 SoC with internal SATA storage, multiple Ethernet and Power-Over-Ethernet (POE) ports, digital Alarm I/O, NAND Flash.
- Continuing engineering for Avigilon Rialto and R-Series ARM platforms originally developed by VideoIQ. (VideoIQ and related patents acquired by Avigilon, 2014.)
- Contract assignment managed by **Black Diamond Networks**, Andover, Mass.

Affirmed Networks Inc.
Acton, Mass.
www.AffirmedNetworks.com

Principal Engineer
Sep. 2013 – Mar. 2015

- Complex C++, Python and Linux kernel C updates for the Affirmed Mobile Content Cloud (MCC) products. Network configuration and routing protocol management for Debian Linux on proprietary clustered systems. AN3000 ATCA custom hardware platform & VMware equivalent on HP-7000 or rack-based x86_64 server clusters.
- Contract assignment managed by **Symphony Teleca**, Westford, Mass.

VideoIQ Inc.
Bedford, Mass.
www.VideoIQ.com

Principal Software Engineer
Feb. 2012 – Dec. 2012

- Embedded Linux platform development for networked video security products based on TI8168 Cortex ARM with multi-channel real-time video analytics.
- Embedded software design for NAS storage manager using Marvell 88F6282A module with dual SATA drives and a Marvell 88E6172 LinkStreet switch.

Symmetric Computing Inc.
Boston, Mass.
www.SymmetricComputing.com

Principal Engineer
Sep. 2011 – Feb. 2012

- OpenSuSE Linux kernel development and product engineering design in support of “Departmental Supercomputer” small cluster product, based on AMD Opteron™ x86_64 multicore processors and Distributed Symmetric Multiprocessing (DSMP™) over direct-connect InfiniBand at 40-56 Gb/s.

Safenet Inc.
Danvers, Mass.
www.Safenet-Inc.com

Principal Engineer
May 2011 - Sep. 2011

- Multi-thread event handling and alarm actions support for StorageSecure high performance NFS / CIFS data encryption appliance. Embedded Linux for Tileria Tile-64 mainboard processor paired with Tile-64 data-stream processor.
- Contract assignment managed by **Symphony Services Engineering**, Westford, Mass.

Crossbeam Systems Inc.
Boxborough, Mass.
www.crossbeam.com

Principal Software Engineer
Apr. 2005 - Dec. 2010

- Architecture-dependent Linux kernel development supporting the Crossbeam C-Series and X-Series Unified Threat Management network security platforms
- Red Hat Linux modifications for Intel x86 and x86_64 platforms, including KVM - QEMU virtualization, multicore SMP and NUMA-aware memory management
- Linux platform support and packet accelerator drivers for Cavium Networks Octeon™ and Octeon Plus™ multicore processors
- MIPS64 port and Crossbeam NP6 board support package for EZchip EZdriver
- Technology and requirements evaluation for IPv6, IPMI, SSI, and multicore processor alternatives
- Source control organization & open-source license evaluation; familiar with Coverity, CodeStryker, Bugzilla, Source Navigator, automated build procedures, RPM packaging

Crossbeam Systems Inc.
Boxborough, Mass.
www.crossbeam.com

Independent Contractor
Sep. 2004 - Apr. 2005

- Experimental Linux kernel development of asymmetric multi-kernel support for Intel Xeon® SMP and HT platforms, using Red Hat Linux 7.3 and EL v3 (2.4.18 and 2.4.21) on Crossbeam C30 and X80 platforms. Successful implementation with up to four concurrent kernels.

Katana Technology Inc.
Acton, Mass.
www.katana-technology.com

Principal Engineer
Jun. 2003 - May 2004
[stealth precursor to [Virtual Iron Software](#)]

StarBak Communications Inc.
Waltham, Mass.
www.starbak.com

Principal Engineer
Feb. 2003 - Jun. 2003

Vividon Inc.
Sudbury, Mass.
www.vividon.com

OS Software Engineer
Jun. 2000 - Jan. 2003
[merged with StarBak Communications, Feb. 2003]

Hammer Technologies Inc.
Wilmington, Mass.

Project Engineer
Feb. 2000 – Jun. 2000
[Teradyne subsidiary, spun off to Empirix, Fall 2000]

Northstar Internetworking Inc.
Waltham, Mass.

Chief Engineer
Sep. 1999 – Feb. 2000
[Teradyne subsidiary, discontinued Feb. 2000]

Videoserver Connections Inc.
Marlborough, Mass.

Consulting Engineer
Oct. 1997 – Feb. 1999
[subsidiary of Videoserver Inc. (Ezenia)]

Augment Systems Inc.
Westford, Mass.

Chief Technology Officer
Nov. 1993 – Aug. 1997

Ungermann-Bass Inc. - Product Operations
Andover, Mass.

Chief Engineer
Mar. 1990 – Jul 1993

Prime Computer Inc.
Framingham, Mass.

Principal Technical Consultant
Jun. 1985 – Oct. 1989

GTE Telenet Communications Corp.
Burlington, Mass.

Chief Scientist, PAD Architecture
Oct. 1981 – May 1985

Cambridge Telecommunications Inc.
Burlington, Mass.

Manager, Front End Software
Oct. 1978 – Sep. 1981

Digital Equipment Corp.
Maynard, Mass.

Principal Software Engineer
Sep. 1976 – Sep. 1978

IBM VM/370 Development
Burlington, Mass.

Staff Programmer
Aug. 1971 – Aug. 1976

IBM Cambridge Scientific Center
Cambridge, Mass.

Sr. Associate Programmer
Oct. 1968 – Jun. 1971

Education / Training

- Massachusetts Institute of Technology, Electrical Engineering
- Stevens Institute of Technology, Computer Programming

Affiliations / Memberships / Recognition

- Association for Computing Machinery - Professional Member
- IEEE, IEEE Computer Society, IEEE Communications Society
- IEEE Communications Society Boston Chapter, Executive Committee
- Co-inventor, U.S. Patent 7,127,506 - "PC Configuration Fault Analysis"
- American Contract Bridge League - Bronze Life Master 1983, Silver Life Master 2016
- Town Meeting Representative, Town of Reading, Precinct 3 - 2004 to present
- Community Planning & Development Commission, Town of Reading, 2007 to present
- Recognized by [Marquis Who's Who](#):
[Who's Who in America](#), 51st and subsequent editions, 1992 - 2015
[Who's Who in the World](#), 11th and subsequent editions, 1993 - 2013
Recommended for [Lifetime Achievement Award](#), 2018