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Summary

- * Linux based Firmware and Device Driver(ARM/PPC & x86), FileSystem
- * Platform Bringup, Diagnostics software, Power management & Environmental Monitoring.
- * IPMI, BIOS/BMC and Adapter Firmware Development.
- * Post-Silicon Verification, Hardware bring-up.
- * Storage & Fibre Channel Technology, Virtualization, Viking/AgigA NVDIMM.
- * Operating System: Linux, FreeBSD, Solaris (SPARC & x86).
- * C, C++, GO, Java Programming Language
- * Database: MemcacheD, Redis, LevelDB/RocksDB, MySQL, InfluxDB
- * Performance Engineering : VTune, Perf, Oprofile. (Kernel and Application Profiling)
- * Web Tech: Zookeeper, Ansible/Puppet, NodeJS/AngularJS, Kibana.

Work Experience

Honeycomb Data (Stealth Mode) (Aug 2014 -)

Engineering Manager

- Hands on design/development of Hyperscale Distributed Block/Object Store Cloud Storage System(Control + Data Plane), ISCSI/Storage Kernel development of PCIe-SSD NVME + DPDK. Application/Kernel Performance Engineering. Additional responsibility includes IT, Patent Portfolio, Hiring. Managing team of 12(Object Store, FTL, and Kernel).

Samsung . (Aug 2013 - Aug 2014)

Architect

- Involved in Design & Development of Host Linux Driver Development for next generation NVME/Block Driver, Caching Layer, Host initiated GC.

Cisco Systems, Inc (March 2009 - Aug 2013)

Technical Lead

- Fiber Channel Over Ethernet (Converged Network Adapter)
Driving FCOE Firmware & Device Driver Development(XenServer) for Cisco Converged Network Adapter. Interface with open source community.
- ISCSI Userspace
Responsible for porting TCP/IP Stack, Network driver & MPT-SAS Driver in User Space. Benchmarking ISCSI storage stack performance in UserSpace on Intel Platform .
- x86 Server BMC/HW Bringup (OS: Linux; Language: C; Arch: ARM)
Firmware Development of BMC Firmware. Task includes H/W-S/W, BMC-BIOS integration, driver development, boot-loader, power & environment monitoring along with maintenance of the product.

Sun Microsystems (July 2000 - Feb 2009)

Sr. Staff/Engineering Manager

- Network Express Module (10GE Chip Bringup)
Firmware Development, Diagnostics Tools, Post Silicon Verification of MR-IOV 10GE chip with 6 PCI-E endpoint for Sun Blade Server product.
- Platform Bring-up (OS: Linux, Language: C, ARCH: x86/ARM)
As a team, responsible for Software bring-up on our new hardware (Chassis Management Module/Blade Server). Task involves HW validation(I2C topology) and existing S/W enhancement to legacy embedded Linux software on Sun Blade/CMM.

- Diagnostics for CMT Processor (OS: Solaris, Arch: SPARC, Lang: C)
Involved in developing test and driving diagnostics project for next generation Sun CMT processor for Ontario Platform.

- * Service Processor Initiated Diagnostics (OS: JavaOS, Lang: Java, Arch: PPC)
Involved in designing and prototype of Service Processor Initiated Diagnostics module.

- * FRU ID Diagnostics and Availability (OS: Solaris, Lang: C, JAVA, Arch: x86)
Involved in designing and developing SUN FRU ID program across Sun Platform.

Group Ipex. (May 1999 - July 2000)

Software Engineer

- * Server Control (OS: Solaris/Linux/AIX, Lang: C, Arch: x86)
Designed and developed component instrumentation to perform Environment monitoring and configure hardware sensor for Intel Motherboard. I2C based Serial Bus is Used for Platform Management.

- * PCI Laser Link Driver (OS: Solaris, Arch: x86, Lang: C)
Designed and developed PCI Laser Link Driver on SPARC 2.5. Implemented Stream and Block Driver in the same module.

Wipro Infotech. (Sept. 97' - Apr 99')

- * PDS/PQS Monolithic Driver (OS: Windows, Arch: x86, Lang: C)
Designed and Developed PCI-SCSI Monolithic Driver for NCR 53c875 Chip. Implemented Plug 'n' Play feature supported in Win2K.

- * PDS/ PQS Drivers (OS: Solaris, Arch: x86, Lang: C)
Designed and Developed HBA Driver using SCSI Architecture for NCR 53c875. Implemented auto-configuration and HBA Entry Points.

PCL Mindware. (Sept 96' - Sept 97')

- * Performance Monitoring and Display for DIOSA
Designed and Developed message oriented middleware. Implemented to service the request generated by client and forward it to Server and vice-versa.

HACE Ltd. (Aug. 95' - Sept. 96')

- * Analog Recorder/Data Acquisition Display/MET Logging System.
Designed and Developed Software based XY-Recorder to replace old Conventional Recorder.

Patent

- * US 7,168,007 Field Replaceable Identification System Tool.
- * US 9,003,001: BIOS parameter virtualization via use of BIOS configuration profiles.
- * US 20120137158 : Dynamic power balancing between servers in a chassis (Power Capping)