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OBJECTIVE To obtain a full time position in systems software design, development and research.

EDUCATION

Carnegie Mellon University Pittsburgh, PA — **GPA: 3.9/4.0**
Master of Science in Information Networking — **MAY 2008**

Pune University, Pune, India — **JUN 2001**
Bachelor of Engineering in Computer Science

SKILLS

EXPERTISE: Linux Kernel Internals, Windows NT / 2k Kernel internals, Storage Systems, SCSI, CIFS, NFS, Cluster File Systems, Physical File Systems, SMP, NUMA, Storage management
PROGRAMMING LANGUAGES: C, x86 assembly, Perl, BASH

EXPERIENCE

VMware Inc — **JUN 2007 – SEP2007**
Internship at VMware: Project involved design and implementation of a new VMFS (VMware's ESX FS) that can manage a sea of heterogeneous devices exploiting each for its unique properties.

Calsoft Pvt Ltd — **JUL 2001 –AUG 2006**
Years of Experience: 5, ***Last Designation***: Architect
Responsibilities: Led design, development activities for various clients on projects ranging in team sizes from 5 to 25 members. I was also involved in business-development and actively mentored student academic projects.

Selected Projects:

- Enhanced the Linux kernel for NUMA hardware for Scalemp, which involved extensive changes to several kernel subsystems. Made the slab allocator in the Linux kernel NUMA aware through a major change. Submitted patch part of mainline kernel now.
- Led a design and development team for a distributed, enterprise level storage management solution for NetApp built on top of Microsoft's Distributed File System that Performed namespace management including migration and data recovery.
- Made enhancements and bug fixes to the OpenGfs Cluster File System for Kazeon. Submitted patches to the open source community.
- Extensions to CIFS-VFS (the linux CIFS client) to support a network backup tool for Neoscale, a data security company, including getting ACL's, alternate streams, change notification support etc.
- Direct CIFS: Developed a cluster file system for Windows to achieve high throughput direct data transfer in a NAS environment by extending CIFS on the client side.
- Developed a SCSI command replay engine in the Windows kernel for testing VMware's SCSI HBA driver for Windows XP/2000.

Research

fsstats**:** Building tools and services to gather statistics of static file attributes and build a public DB.

ACADEMIC PROJECTS

OPERATING SYSTEMS DESIGN AND IMPLEMENTATION [15410] — **SPRING 2007**
Implemented a preemptive, multithreaded Unix like kernel for x86 systems. Implemented a scheduler, VMM, system calls, synchronization primitives, process/ thread management and interrupt handlers. Implemented a user level thread library on top of this kernel.

EMBEDDED SYSTEMS [ARM XSCALE PLATFORM] — **FALL 2006**
Implemented a Real Time OS with Rate Monotonic Scheduling and Highest Locker Priority

SYSTEMS PROGRAMMING — **FALL 2006**
Implemented a Malloc library (and analyzed for performance), UNIX like shell, web proxy.

RELEVANT COURSES

Operating Systems Design and Implementation, Embedded Systems, Distributed Systems, Adv. Topics in Computer Systems (research), Comp. Architecture, Adv. Operating Systems and Distributed Systems, Fundamentals of networks, Security, Managerial economics and business management.

STUDENT PROJECTS MENTORED

CALSOCKS:	A FreeBSD like socket interface for Windows	**2002-2003**
SNAPEXT2:	File level snapshots for the ext2 file systems	**2003-2004**
EXTC:	A Cluster File System for Linux by extending Ext3	**2005-2006**

AWARDS/ HONORS

Recipient of a $20,000 scholarship from Carnegie Mellon University for its MSIN program, 2006-2008
Recipient of a $5000 scholarship from Calsoft Pvt Ltd to attend Carnegie Mellon University, 2006-2008
Recipient of the 'Calsoft Excellence' award, for technical excellence, 2004-2005
Won second prize at the 'Concepts' project exhibition for writing "WINIX Operating System"**,** 2001.