AMIT GUD

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OBJECTIVE

To contribute to the computer systems research and further the file system knowledge.

WORK EXPERIENCE

* Member of Technical Staff – **VMware, Inc.**, Palo Alto, CA
  Worked on developing host to guest file system (HGFS). ***June 2007 – present***

  HGFS is a cross-platform network fs with client server model. I lead important development on cross-platform server and Linux client. Helped develop number of important features like case-insensitivity, and support for asynchronous operations and pluggable transports. Did complete architecture change to move from synchronous transport to asynchronous ones. Did protocol revision to support case-insensitivity and base for other features like change notification, oplocks, EAs, and byte range locks.

  Also worked on guest to host time synchronization using a novel clock slewing technique not used so far in Vmware. Also worked on Memory balloon driver.

* **Graduate Teaching Assistant** with Kansas State University for graduate-level computer science courses. ***August 2006 – May 2007***

* Software Engineering Intern – **Red Hat, Inc.**, Westford, MA
  Hacking on NFS - fixing bugs and adding minor features and upstream NFS user tool modifications. As a cross-functional intern project, participated in developing future investment plan in BRIC countries for Red Hat. ***May 2006 – August 2006***

* **Graduate Research Assistant** with Dr. Neilsen at Kansas State University
  Designing Software Tools for Watershed Dam Design/Analysis for **United States Department of Agriculture** (USDA). ***August 2005 – May 2006***

* Associate Software Engineer – **Symantec Corporation** / **VERITAS Software**, Pune, India ***March 2005 - July 2005***
  Project: *Opforce*, an automated server deployment tool.

* Quality Assurance Engineer - **Calsoft Pvt. Ltd.**, Pune, India
  Project: *Panasas*, a scalable and distributed storage solution based on Object Storage Devices (OSD). ***October 2004 - March 2005***

* Project Intern – **Defense Research & Development Organization** (DRDO), Pune, India ***May 2003 – April 2004***
  Project: Embedded web server for missile launcher controller facility.

PUBLICATIONS / TALKS

* "*Chunkfs*" Ottawa Linux Symposium (OLS) 2007.
* Gud, A. "*Smart Card Technologies & Markets Worldwide.*" 171-page Analyst Report published by Business Communication Inc., CT, USA
* Gud, A., Andresen, D., Mizuno, M. "*A Scalable Search Algorithm in Unstructured Peer-to-Peer Networks.*" PDPTA 2006.
* Henson, V., Ven, Arjan, Gud, A., Brown Z. "*Chunkfs: Using divide-and conquer to improve file system reliability and repair.*" USENIX HotDep 2006

EDUCATION

* Master of Science (M.S.) from Kansas Sate University, Manhattan, KS. Major: Computer Science. **GPA: 3.89 / 4.00** ***August 2005 - May 2007***
* Bachelor of Engineering (Computer Engg.) from University of Pune, India.
* Stood 5th amongst 140, first Class with Distinction ***August 2000 - May 2004***

MAJOR AWARDS

* 3rd prize at IIT Techfest Competition, Mumbai for project Remotely Controlling Devices
* Abhinandan Shah Memorial Computer Excellence Award 2004 by Rotary Club
* Travel Grant by USENIX for OSDI 2006 conference and HotDep 2006 workshop

MAJOR PROJECTS & SEMINARS UNDERTAKEN

* [**Thesis**] [LINUX KERNEL] chunkfs – a recovery-driven file system design approach to reduce file system checking and crash recovery (fsck) time.
* Random search techniques in unstructured decentralized peer-to-peer networks
* [LINUX KERNEL] Elastic Quota File System (EQFS) - maximizes disk space utilization on the server
* [NETWORKS / REAL-TIME] Embedded web server for DRDO, Pune
* [REAL-TIME] Remotely controlling household devices
* [REAL-TIME] Embedded car controller using Siemens 167 & CAN protocol
* [REAL-TIME] Worked on a GPS project for fleet tracking using GPS
* Seminar on Cryptographic File System using Smart Cards

TECHNICAL SKILLS

* Specialized in on-disk and network file systems
* Linux Kernel-space / user-space programming
* Multi-threaded programming
* Familiarity with numerous operating systems like TinyOS, BrickOS, Lejos and Windows.
* Familiarity with debuggers and various SCMs

MAJOR LINUX KERNEL PATCHES

* Spinlock initialization unification - upstream
* PCI driver migration to new style device probing - upstream

INTERESTS

* Writing and journalism – Published writer. Contributing Editor, Card Technology Magazine, USA. Published technical and non-technical articles in numerous national and international publications
* Social work – working with non-profit organizations like Masum and Sanmati Bal Niketan. Primarily help them spread the word

ASSOCIATIONS AND MEMBERSHIPS

* USENIX, Pune LUG (PLUG), K-State LUG (K-SLUG)