

ATUL TALESARA

princeatul @ gmail . com

OBJECTIVE	To excel as an eminent programmer with expertise in the areas of Storage and Operating Systems
EDUCATION	<p>M.S. in Computer Engineering (ECE) Expected Dec 2008 Carnegie Mellon University, Pittsburgh, PA, USA</p> <p>Bachelor of Engineering, Computers June 2002 Pune Institute of Computer Technology (PICT), Pune University, India</p>
SKILLS & MAJOR INTERESTS	<ul style="list-style-type: none"> Operating Systems (kernel internals) Storage & Filesystems Security (Intrusion Detection/Prevention Systems(IDS/IPS), Traffic anomaly) Networking (TCP/IP) System Programming (GDB internals & stub, GNU tool chain: assembler, linker, binutils)
LANGUAGES	C, Perl, Shell programming, Java, Assembly programming (x86 & MIPS)
COURSES	Computer Systems, Operating System Design and Implementation, Advanced Storage Systems, Packet Switching, Computer Networks and Computer Security
RESEARCH	<p>Replay Filesystem Traces on Parallel FS, using Virtual Machines Aug 2008 - Present Guide: Prof. Garth Gibson (co-founder & CTO Panasas) at CMU Parallel Data Lab</p>
EXPERIENCE	<p>Google Inc., Mountain View, CA May - August 2008 Software Engineer, Intern</p> <ul style="list-style-type: none"> Devised a complete plug-in framework for database consistency check, including fixes <p>Nevis Networks, India Pvt. Ltd., Pune Jan 2004 – July 2007 Software Engineer</p> <ul style="list-style-type: none"> Engineered GDB stub for remote debugging on Nevis' multithreaded Network Processor (Supernova) Devised troubleshooting and tracing infrastructure for multi-threaded program Validated IPS/L2 Attacks prevention feature in the Nevis Product Tweaked GNU tool chain (gcc, gas, ld, binutils), devised makefiles & linker scripts Developed & enhanced in-house tools to generate IPS attacks Maintained & tweaked the Nevis boot code & implemented POST <p>IBM, India Software Labs (ISL), Pune Feb 2003 – Jan 2004 Validation Engineer for IBM's LDAP Suite</p> <ul style="list-style-type: none"> Validated IBM's LDAP Client-Server Suite, IBM Tivoli Directory Server (ITDS) on a variety of UNIX (flavors of Linux, AIX, Solaris, HP-UX) Constructed complex real-world test scenarios in PERL Conceptualized & implemented advanced testing framework allowing remote control over process and logs, using STAF, PERL and C <p>Kuokoa Networks, India Pvt. Ltd. Jun 2002 – Dec 2002 Software Engineer</p> <ul style="list-style-type: none"> Built filesystem Consistency Check Utility for Kuokoa Data Management System (KDMS) Developed Data Re-layout from legacy storage servers on to KDMS
PROJECTS & HONORS	<ul style="list-style-type: none"> Complete Operating System: Designed and Implemented a complete functional Unix-like preemptive multi-tasking kernel featuring multi-threaded programming, device drivers, virtual memory, interrupt handling and concurrency control Designed and Implemented complete Thread Library: Thread life cycle management and synchronization primitives, viz. Mutexes, Condition Variables, Semaphores and Readers-Writers Lock Designed and developed a full-fledged <i>e2fsck</i> (filesystem consistency check program) for Ext2 filesystem, <i>malloc</i> library, etc. HaRmOnY: A Mixed Media System on Linux, award winning, undergraduate final year project. Multimedia capable EXT2 file system and an efficient Real Time delivery scheme over the network. Winners of the Kuokoa Trophy: "Best product in Systems/Networking"
OTHER ACTIVITIES	<ul style="list-style-type: none"> Black belt in Karate, "Star of the Institution" award at karate institution Photography, Reading, Trekking, Outdoor sports, esp. Soccer and Volley Ball