

MUKIL KESAVAN

331629 Georgia Tech Station,
Atlanta, GA 30332

Email - mukil@cc.gatech.edu
Web - <http://www.cc.gatech.edu/~mukil/>

Education

PhD, Computer Science Georgia Institute of Technology, Atlanta, USA. <u>Advisor</u> : Prof. Karsten Schwan	May 2008 – Present
Master of Science, Computer Science Georgia Institute of Technology, Atlanta, USA. Cumulative Grade Point Average	May 2008 3.9/4.0
Bachelor of Engineering, Computer Engineering College of Engineering, Guindy – Anna University, India. Cumulative Grade Point Average	June 2005 8.42/10

Skills

OS/Hypervisors	Linux, Windows, Xen, VMWare ESX Server
Databases	SQL, PL/SQL
Programming	C, C++, Java, X86 ASM, Linux Kernel Programming, Bash Scripting, sed, awk, Cg, HLSL (Shaders), Cell Programming, Win32 and DDK Programming
Scripting/web	HTML, XML, JavaScript, Java Applets, ASP, Java Servlets

Industry Work Experience

Research Intern, Microsoft Research, Redmond, WA (June 2008 – Aug 2008)

Power-aware Multicore Scheduling

Developed a policy based user level multicore scheduling framework that consolidates applications on to minimal set of processing cores and meets quality requirements.

Member of Technical Staff Intern, VMware, Palo Alto, CA (June 2007 – Aug 2007)

Host based Anti-virus Solution

Developed a hypervisor based anti-virus proof-of-concept prototype for the VMware ESX server product and evaluated it's performance.

Software Engineer, Verizon Data Services India, India (June 2005 – July 2006)

Jabber-XMPP Protocol Implementation

Implemented the Jabber-XMPP Instant Messaging protocol RFC 3920 & 3921 used to connect to jabber servers and establish an internal messaging system platform for the company.

FiOS Drive Data Backup and Synchronization

Developed a windows network drive shell extension as part of a team.

Academic Work Experience

Research Assistant, Georgia Tech, Atlanta, GA (Aug 2007 – Present)

ViP: Virtualized Multi-core Platforms

Currently working on Infiniband Virtualization & QoS advised by Dr. Karsten Schwan & Ada Gavrilovska.

Teaching Assistant/Grader, Georgia Tech, Atlanta, GA (Aug 2007 – Dec 2007)

CS6210: Advanced Operating Systems

Graded student assignments, proctored exams and held TA office hours for the graduate level course taught by Ada Gavrilovska.

Research Assistant, Georgia Tech, Atlanta, GA (Jan 2007 – May 2007)

Aware Home Research Initiative

Built the camera based sensing infrastructure and Activity Characterization prototype for the Tableau Machine project advised by Dr. Gregory Abowd.

Publications

Mukil Kesavan, Adit Ranadive, Ada Gavrilovska, Karsten Schwan, "*Active Coordination (ACT) - Towards Effectively Managing Virtualized Multicore Clouds*", Cluster 2008, Japan, Sep. 2008.

Adit Ranadive, Mukil Kesavan, Ada Gavrilovska, Karsten Schwan, "*Performance Implications of Virtualizing Multicore Cluster Machines*", 2nd Workshop on System-level Virtualization for High Performance Computing, Glasgow, (HPCVirt 2008).

Posters

Mukil Kesavan, "*Host-Based Anti-virus Scanning*", VMworld 2007 Academic Poster Session, San Francisco, September 2007

Mukil Kesavan, D. Amrit Swarup, K. Palanivel Andiappan, "*A Generic Resilient Multipath Routing Mechanism for Failure Prone Ad Hoc Networks*", 12th IEEE International Conference on High Performance Computing (HiPC'2005) - Poster/Presentation Session.