

GAUTHAM SHENOY R

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OBJECTIVE

Seeking admission to a Graduate School for a M.Sc/PhD course in Computer Science.

RESEARCH INTERESTS

Theory of Computation, Data Structures and Algorithms, Concurrency Control and Locking, Number Theory, Operating Systems Design and Implementation.

EDUCATION

- **B E, Computer Engineering** **Jun'06**
National Institute of Technology Karnataka, India
GPA: 4.0/4.0 or 82.02%
Related Courses:
 - **Undergraduate:** Theory of Computation, Design and Analysis of Algorithms, Concrete Mathematics, Number Theory and Cryptography, Compiler Construction, Operating Systems.

EXPERIENCE

- **System Software Engineer,** **Jun'06 – Present**
IBM Systems and Technology Labs, India
 - Member of the Core Kernel Group at the Linux Technology Center. Worked on projects related to the Linux Kernel including CPU-Hotplug Locking Rewrite, Preemptible RCU Implementation, Idle System Power Management, Lockdep- A lock dependency validator, and Virtualized Filesystem Pass-through based on the P9 protocol.
 - Technical mentor for IBM Summer Internship'08 and IBM Extreme Blue Internship'07.
 - Campus Relationship Manager(CRM) for National Institute of Technology Karnataka (NITK) Surathkal.
- **Internship, IBM Extreme Blue, IBM India Software Labs** **May'05 – Jul'05**
Design and implementation of an Event driven Publish-Subscribe protocol to enable dynamic view-wiring within the Eclipse Communications Framework at runtime.
- **Externship, Department of MCA, NMAMIT, Nitte** **May'04 – Jul'04**
Design and implementation of an algorithm to detect the scene changes in an MPEG-1 video stream for Indexing in a Generic Interactive Video on Demand System.
- **Externship, Department of MCA, NMAMIT, Nitte** **Dec'03 – Jan'04**
Design and implementation of a Drag-n-Drop Flowchart Editor with runtime support for Syntax Check.

PUBLICATIONS

- Vaidyanathan Srinivasan, Gautham R Shenoy, Srivatsa Vaddagiri, Dipankar Sarma, Venkatesh Pallipadi - **Energy-Aware Task and Interrupt Management in Linux**, *In Proceedings of the Linux Symposium*, Volume 2, Ottawa, ON, Canada, 2008, Linux Symposium.
- Paul E. McKenney, Srivatsa Vaddagiri, Gautham R. Shenoy - **Read/Write Lock with reduced reader lock sampling overhead in absence of writer lock acquisition**, *Patent Application*, IPC8 Class AG06F1200FI, UPSC Class 711163. Available at <http://www.faqs.org/patents/app/20080320262>

OTHER RESEARCH

- Hrishikesh Amur, Gautham R Shenoy, Srivatsa Vaddagiri, Dipankar Sarma, - **Plimsoll: A DVS Algorithm Hierarchy**. Available at <http://ego.randomwalk.in/papers/mypapers/plimsoll.pdf>

TALKS, WORKSHOPS AND BOFS

- **Interesting usage of familiar Data-Structures in the Linux Kernel: Directed Graphs**, a Lecture delivered at the National Institute of Technology Karnataka (NITK) Surathkal, Sep '09
- **Power Aware Scheduler**, Birds of Feather(BoF) Session conducted at Linux Symposium, Jul'08
- **Introduction to Kernel Synchronization Primitives**, Lecture delivered at Indian Institute of Information Technology Bangalore (IIITB), Mar'07.
- **Introduction to Linux Kernel Programming**, Workshop conducted at National Institute of Technology, Karnataka (NITK) Surathkal, Aug'06.

COMPUTER SKILLS

- Programming: C/C++, Python, Java, pyGTK, Linux shell scripting.
- Open Source Projects: Linux Kernel Development.
- Software: GDB, $\LaTeX 2_{\epsilon}$, GnuPlot, Gimp, LiVES.
- Platforms: Linux, WindowsXP.

SOFTWARE PROJECTS

- **CPUMeter**: A pyGTK tool that displays the CPU-Utilization of the CPUs on a Linux Machine and reflects the changes in online/offline states of the CPUs.

ACADEMIC EXPERIENCE

- B.E Dissertation: *Power Management for Server Systems*, Apr'06.
- A Driver Program for the game "*Hand-of-Bot*", Mar'06.
- "*Apniboli*", a English to Hindi Language Translator, Dec'05.
- An AI module that plays the game "*Race to Connect*", Mar'05.
- A compiler for C language, Mar'05.
- A Mini-Desktop Search Engine for Text files, Nov'04.
- A PDP-11 Assembler and Simulator, Apr'04.
- A Text Editor on DOS, Feb'04.

HONOURS, AWARDS AND ACHIEVEMENTS

- Was among the Top 5 students in Academics in the Computer Engineering class of 2006 at NITK Surathkal.
- Awarded a "Special Mention" Certificate for the Software Project "*ApniBoli, The Language Translator*" at Techfest'05, Indian Institute of Technology, Mumbai.
- Awarded the Certificate of Excellence for "Outstanding Contribution" at IBM Extreme Blue'05 Internship.
- Secured Rank 27 in Karnataka CET examination conducted in the year 2002.

CO-CURRICULAR ACTIVITIES

- Executive member, Software Committee, Engineer'06.
- Convenor, Open source Enthusiasts Network(*OPEN*), '05-'06.
- Executive member, Software Support Committee, Incident'05.
- Member of the Films Club, NITK Surathkal, 2003-2006.

REFEREES

Available on request.