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# SaiSuresh KrishnaKumaran

## Objective

Seeking an Internship position in Computer Sciences for Summer 2005.

## Areas of Interest

Computer Architecture, Operating Systems and Database Systems.

## Education

August 2004 - present UW-Madison Madison, USA  
**MS ( Computer Sciences )**

2000 – 2004 Anna University Chennai, India  
**BE (Computer Science & Engineering)**  
GPA 9.542/10  
Class Rank – 1 (out of 120 students)

## Experience

TA (Teaching Assistant) for CS367 in Fall 2004 – Introduction to Data Structures

## Publication

Saisuresh Krishnakumaran, Sai Arunachalam, '**Towards economic Trace Caches-a profile based approach**', Poster session of the *10<sup>th</sup> International Conference on High Performance Computing 2003*, Hyderabad, India.

## Achievements

- My Team (Team Q) was placed **SECOND** among 187 teams in the 2004 **ACM North Central North America Programming Contest**.
- Department topper in Anna University.
- Tamil Nadu Engineering Admission: Ranked 3<sup>rd</sup> in the state of Tamil Nadu, India. (100,000 students appeared for the Tamil Nadu Professional Courses Entrance Examination)

## Awards Received

- ❖ '**Late Thiru A. Muralitharan Endowment Prize**', a **Gold medal** by College of Engineering Guindy, Anna University for securing the highest marks in the second year of my undergraduate study.
- ❖ '**1951 Alumni Golden Jubilee Endowment Prize**' by the Alumni Association of Anna University for maintaining the highest CGPA.
- ❖ '**Aravind Mehta Memorial Award**' by the Alumni Association of Anna University for securing the highest marks in Mathematics III course in the college.

Computer Skills	<p><i>Operating systems:</i> LINUX, UNIX, Windows.</p> <p><i>Programming languages:</i> C, C++, JAVA, Intel 8086 Assembly</p> <p><i>Tools:</i> Lex, Yacc</p> <p><i>Simulators:</i> SimpleScalar (Architecture Simulator)</p> <p><i>Others:</i> SQL, VHDL, Handel-C, Shell scripts</p>
Courses Taken @ UW-Madison	<p>CS752 – Advanced Computer Architecture.</p> <p>CS764 – Topics in Database Management Systems</p>
Projects	<ul style="list-style-type: none"> <li>➤ <i>A Soft Core Processor for Parameterized HPL-PD Architecture.</i> It is a vehicle to investigate processor architectures having significant parallelism. It is a reliable model to analyze the performance of custom architectures and would facilitate in decreasing the time for hardware realization.</li> <li>➤ <i>Re-configurable Architectural Kit (RAK).</i> RAK (implemented in VHDL) is a platform to study and analyze the performance of various static processor configurations.</li> <li>➤ Implementation of 'Dynamic Instruction Reuse' using SimpleScalar.</li> <li>➤ A 'C' compiler using LEX and YACC.</li> <li>➤ <i>Disk access optimization using 'deferred copy' and disk block sharing in UNIX file system.</i> Added fields in the Inode and disk block structures of the UNIX file system. These fields were manipulated by new system calls in order optimize the disk block accesses.</li> <li>➤ <i>Implementation of 'A mail server and a messenger' designed using Rational Rose.</i></li> <li>➤ <i>Device Driver for a virtual CD drive in Linux environment.</i></li> <li>➤ <i>Simulation of the Control Logic for an Automatic Teller Machine using VHDL.</i></li> <li>➤ <i>Automatic Traffic Controller – Hardware Project.</i></li> <li>➤ <i>Simulation of Task Scheduling and Interrupt Processing by Microprocessors.</i></li> </ul>
Extra/Co - curricular activities	<ul style="list-style-type: none"> <li>➤ I was an active member of the SIGARCH, the computer architecture research group at Anna University, India.</li> <li>➤ I have won a number of certificates and prizes in Oratorical, Essay Writing and Quiz Competitions.</li> </ul>
Responsibilities	<ul style="list-style-type: none"> <li>➤ I had been an active member and organizer of 'Abacus', the technical symposium of DCSE, Anna University, India.</li> <li>➤ NSS (National Service Scheme) volunteer. Attended a 15-day camp at a village near Chennai, India during June 2001. Also played an active role in organizing a free medical camp for the poor villagers there.</li> </ul>
Special Interests	Meditation, Cricket and Tamil Poems