

Chidambareswaran (Chids) Raman

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OBJECTIVE

A challenging full-time position in research & development of software systems, tools and languages starting May 2007.

EDUCATION

M.S Computer Science Texas A&M University, College Station GPA 3.76 Aug 04 - May 07

Thesis Focus : Distributed Containers in Standard Template Adaptive Parallel Library (STAPL) Framework

Advisor : Dr. Nancy M Amato, Professor of Computer Science

Coursework: Parallel Algorithms Design & Analysis, Software Engineering, Supercomputing, Special Topics in Run time systems for Parallel Computing, Generic Programming, Computer Architecture, Analysis of Algorithms, Artificial Intelligence, Cortical Networks

Bachelor of Engr. (B.E) Sri Venkateswara College of Engineering - 82.5% Jul 00 - Jun 04

Computer Science & Engr University of Madras, India

Coursework: Programming Languages, Compilers, Software Engineering, DBMS, Data structures, Algorithms, OOPS, Operating Systems, Networking, Digital Logic & Design, Computer Architecture, Microprocessors, Wireless Communication

SKILLS

LANGUAGES	C, C++ (with STL, Boost), Visual Basic, X86 ALP, SQL, LISP, Shell Scripting, Verilog, Java(medium)
OS	Linux, Solaris, Windows, Macintosh
DATABASE	MySQL, Oracle, MS Access
WEB DEVELOPMENT	PHP, ASP, HTML/ DHTML, XML
TECHNICAL TOOLS	Etnus TotalView, GDB, SimpleScalar, LaTeX, Matlab(beginner)
SOFTWARE	CVS, SVN, Rational Clearcase , Adobe Photoshop, Sigma Plot

PUBLICATIONS

- O Pearce, **C Raman**, Harshvardhan, K Bacon, S Mittal, G Tanase, N Thomas, N Amato, L Rauchwerger, **STAPL Graph Generator Library**, To be Submitted, Parasol Lab, Dept. of Computer Science, Texas A&M University, Dec 2004 , Texas USA
- **Chids Raman, Metrics & Testing In Agile Software Development**, Research Report, Software Process Improvement Lab, Dept. of Computer Science, Texas A&M University, Dec 2004 , Texas USA
- **Chidambareswaran Raman, Evolving a Super Computing Architecture for modeling Cortex: Towards A Novel Perspective in Object Information Encoding**, Research Thesis, Waran Research Foundation, India, Aug 2004, Chennai India
- N Venkateswaran, **R Chidambareswaran**, B Harish, **A Novel Perspective into the Neuronal Encoding along the Retinal Pathway Employing Time-Frequency Transformation: Part-I for Object & Part-II for Color**, Brain Inspired Cognitive Systems, 2004, Scotland UK
- N Venkateswaran, **R Chidambareswaran**, B Harish, Kolluru Arvind, C Chandramouli, R Rajesh, R Rajasimhan, N Sudarshan, **ψNAM For Massive Neuronal Assembly Modeling: Part-I Processing Elements & Part-II, Array Architecture**, The 6th International Conference on Computational Intelligence and Natural Computing, 2003, NC USA

EXPERIENCE

Co-op Engineer – AMD Performance Library (APL) - Software Strategic Alliance Group May 05 – Dec 05
Advanced Micro Devices , Austin TX

- Designed, developed and tested Performance Library Modules (media and signal processing) optimized for x86 and AMD64 processors, employing threadpooling, intrinsics, inline assembly and SIMD optimization techniques (vector programming).
- Involved in release packaging, writing README, installation instructions, help files to handle small NDA releases.
- Works on both Linux and Windows. Ported infrastructure to Linux and set up Makefiles to automate build and testing.
- Available for download at <http://developer.amd.com/apl.jsp>

Standard Template Adaptive Parallel Library (STAPL) - Thesis Work Aug 05 - Present
Parasol Lab, Dept of Computer Science, Texas A&M

- Working on a parallel superset of Standard Template Library (STL).
- Designing and Implementing parallel **containers, distributed data structures** that provide shared object view.
- Developing and testing of parallel algorithms equivalent to STL algorithms in the STAPL library.
- Designing and developing a generic **Graph Generator Library (GGL)** to generate graphs based on graph composition and attributes.

EXPERIENCE

Web based Information Management System (CS One Stop Information Shop)

Jan 06 – Present
Dept. of Computer Science, Texas A&M

- Designing and developing software modules used to build online applications for managing various secure information systems – department’s graduate application process, faculty search process, scholarship management infrastructure, student information and progress monitoring tool.
- Involves maintaining strict security features, extensive testing and maintenance.
- Supporting thousands of users (applicants and current students, faculty and administrative staff).

Graduate Assistant - Computer System Support

Jan 05 – May 05
Department of Biochemistry and Biophysics, Texas A&M

- Administered installations on Windows, Solaris, Linux, Mac and IRIX systems.
- Performed Apache web server maintenance, website administration, database maintenance.
- Assisted in network management – NIS, Network Security.
- Performed scripting and supported users of molecular visualization software(s).

Neuronal Assembly Modeling(NAM) Simulation – Processor & Environment

Aug 02 - Aug 04
Waran Research Foundation, Chennai, India

- Designed a processor/array model for massive neuronal structure simulation.
- Developed Neuron Modeling Language & code generation for the processor model.
- Designed and developed techniques for analyzing information processing along the retinal pathway.

Teaching & Mentoring Experience

Teaching/Lab Assistant - ENTC 383 Manufacturing Information Systems

Fall 2004
Dept. of Engineering Technology & Industrial Distribution, Texas A&M

- Taught Visual Basic Programming using MS Access as backend.
- Involved in managing/supervising lab sessions and conduct classes when instructor is absent, grading assignments and helping with programming questions during office hours.

Graduate Student Mentor

Summer 2006
Dept. of Computer Science, Texas A&M

- Mentored two undergraduate students, as part of the CS @ TAMU REU and CRA-W DMP program. The students worked on the STAPL Graph Generator Library project for ten weeks.

AWARDS / HONORS & AFFILIATIONS

- Verizon Scholarship, Dept of Computer Science, Texas A & M, 2006.
- Bharat Petroleum Scholarship for Higher Studies (awarded to **15 students from all over India** to pursue higher studies.), 2004.
- Dept of Computer Science-Industrial Affiliates Program Scholarship sponsored by Adobe, 2004.
- Awarded “Intel Innovation in Education” scholarship for attending International Conference on High Performance Computing, Bangalore, India, 2003.
- **Best Undergraduate Project Award**, – Department of Computer Science Engineering, Sri Venkateswara College of Engineering, University of Madras, 2003-2004.

AFFILIATIONS & OTHER INFORMATION

- **Vice President (HR)** International Sponsored Students Association, Texas A&M University, 2004-2005.
- Student Member, IEEE, ACM (since 2003).
- **Graduate Student Panelist** on panels encouraging undergraduate students to pursue graduate program, Dept of Computer Science, Texas A&M, Summer 2006.
- Reviewed papers submitted to conferences in systems and robotics- IPDPS 07, ICRA 07, WAFR 06, RSS 06

WORK AUTHORIZATION- Authorized to work in the US through Practical Training (Currently on F-1 Visa).