

BALAJI SUBRAMANIAN

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OBJECTIVE

To work as a full time software engineer in an organization nurturing innovation.

EDUCATION

UNIVERSITY OF FLORIDA, GAINESVILLE

Master of Science, Computer Science and Engineering (December 2008) [**GPA: 3.44 /4**]

Core courses: Distributed Operating Systems, Analysis of Algorithms, Computer Networks, Concurrent Programming, and Programming Language Principles.

UNIVERSITY OF MADRAS, India

Bachelor of Engineering, Computer science and Engineering May 2004

Graduated with Distinction [**GPA: 3.6/4**]

COMPUTER SKILLS

- **Proficient in C, Java, C++** and Perl in systems programming environments.
- Worked in **Solaris, FreeBSD** and **Carrier grade Linux** operating systems environment.
- Worked on **MPI, UPC** and **SHMEM** multiprocessor programming models.
- Worked with **Unix Shell Script**
- Tools: **Subversion, GDB, make, Valgrind** and Netbeans.

AWARDS & ACHIEVEMENTS

- Earned **Sun Microsystems India engineering center Excellence Award** for demonstration of superior technical skills.

EXPERIENCE

High Performance Computing and Simulation Lab, Programmer, University of Florida Sep 08 to Jul 09
Project profiles: Parallel Performance Wizard for profiling UPC and SHMEM parallel programs.

- Working as a part time programmer for **Dr. Alan George, Professor ECE Dept.**
- Implemented the paper "A Distributed, Programming Model-Independent Automatic Analysis System for Parallel Applications" (HIPS, IPDPS workshop Rome, 09) inside Parallel Performance Wizard.
- Developed and implemented the **IOManager** for the **Profile and Bottleneck Analysis integration.**
- Supported and fixed bugs for parallel performance wizard backend programs.
- Implemented a basic prototype of supporting UPC profiling inside eclipse IDE

Isilon Systems, Software Development Intern, summer 2008, Seattle

Project profiles: data protection group, clustered storage

- Designed and developed the **support for daemonized process** in **user space fail point library** allowing developers to introduce fail points for child process.
- Designed and implemented the interface for the **template functionality in user space fail point** allowing the application to launch with configured fail points.

SUN Microsystems, Member Technical Staff II, March 2005 – August 2007, Bangalore India

Project profiles: High Availability Cluster framework.

- Spearheaded the development of supporting **Oracle RAC10g** version on **Solaris cluster framework**, one of the most needed projects for Solaris cluster.
- Designed, and participated in the development of supporting **Isere with Solaris cluster**, a forerunner project for developing High Availability systems based on **horizontally scaled machines.**
- Supported the **Netra High availability Suite** on **Solaris 11**, ensuring high service levels.

ACADEMIC PROJECTS

- **Distributed Operating Systems (Fall 07)**
 1. Implemented **Token ring topology** to simulate mutual exclusion on distributed systems.
 2. Implemented **File Gossip protocol** to simulate the Replica Manager in Distributed File system using Java
- **Network Security (Fall 07)**
 1. Implemented the **SSL protocol** using Java.
- **Database Implementation (Spring 08)**
 1. Implemented the **Two Phase Multi way Merge-Sort** for Sorted File in Database Implementation using C++.
 2. Implemented Relational Operators used in query processing.
- **Concurrent Programming (Spring 08)**
 1. Implemented a **multi-player interactive Boggle game** in Java.
- **Computer Networks (Summer 08)**
 1. Implemented the **Bit torrent similar protocol** in Java.
- **Programming Language Principles (Fall 08)**
 1. Implemented **Scanner and Top down LL(1) parser** for Pico programming language in Java.
 2. Created a Bag data structure in **ML** programming language.
 3. Implemented the **code generator** using **ASM** framework to generate **byte code**.

OTHER PROJECTS

Prakriti computing, gene interaction model, Chennai

- Implemented libraries in **C++ and Java** to map gene information and store them.

LEADERSHIP ACTIVITIES

College Student Leader, INTERRUPT 2002

- Organized a one-day national technical seminar in computer engineering drawing more than 200 students.