

PAVITHRA SESHADRI VIJAYAKRISHNAN

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OBJECTIVE

Seeking a Programmer position that will provide me with the opportunity to develop skills in software design, development /testing and utilize my analytical and data management abilities.

EDUCATION

M.S. Computer Sciences

May 2012

University of Wisconsin-Madison

GPA: 3.5/4

Course work: Advanced Operating Systems, Information Security, Advanced Computer Networks, Database Management Systems, Programming languages and compilers, Data Models and Languages, Introduction to Algorithms

B.E. Computer Science & Engineering

May 2010

Anna University, India

GPA: 9.51/10

Academic Interests: Data Structures and algorithms, Operating Systems

EXPERIENCE

Mar 2011 - present

Project Assistant at ICECUBE [Department of Physics, UW- Madison]

I am part of the Data Acquisition software team, we work on processing and filtering data accumulated from neutrino detectors in the South Pole. I primarily contribute by writing relevant unit tests for DAQ software.

PROJECTS

De-duplication in YAFFS

Implementation of De-duplication in YAFFS2, the NAND specific Flash file system on Android OS using chunk index, a compact in memory data structure for identifying new file chunks, which abates data storage limitations.

Centralized Task Scheduling in Home Network

Developed on the Microsoft HomeOS platform, the scheduler runs tasks seamlessly on any device connected to the home network. The project involved design of a front-end and the underlying C# code to provide an interface to schedule user tasks.

Report and demo at <http://research.microsoft.com/en-us/um/redmond/projects/homeos/homeos-demos.htm> (Proj 4)

Measurement of Computer Systems

Empirical analysis on a real system to determine the cost of a context switch, the number of entries in the TLB, and the cost of a TLB miss detailed disk characteristics such as seek time and rotational speed in a real time system.

Sequence Alignment using Ant Colony Optimization in C

A project on alignment of DNA sequences using Ant Colony Optimization. The algorithm divides a set of sequences into several subsections vertically by bisecting the sequences recursively using the ant colony optimization method. Coding is done using C language.

B plus tree based indexing in P2P framework

A distributed search application, where the files are distributed and searched over the peer-to-peer network based on the keywords using a B+ tree on a framework consisting of network of nodes in a peer-to-peer fashion.

PROFICIENCY

Languages: C, C++, Java, SQL, HTML, VB, PHP, JSP, ASP.NET, PERL, Javascript

Platforms: Windows, Linux

Databases: Oracle, MySQL

ACHIEVEMENTS AND INTERESTS

- Consistent Academic Performance - Secured one among the first three ranks in all the eight semesters during my undergraduate program.
- Won the first prize in the event 'Code chaos' - a coding event in 'C' language in KRUADE '09, a national level technical symposium held at PSG College of Technology, India.
- One among the finalists of the event 'Break Out' in KRIYA'09, a national level technical symposium held at PSG College of Technology, India.
- Painting, playing the Veena, cooking.