
OBJECTIVE:

I am seeking an internship/co-op position in the field of Software Development leading to a full-time career.

TECHNICAL SKILLS:

Languages: C++, Java, Python, PL/SQL.

Technologies: Distributed Computing, Virtualization, Database Internals, Multithreaded Programming, Database Design, Network Programming, Object Oriented Design.

Platforms: Linux, Microsoft Windows.

Databases: Oracle 11g, Microsoft SQL Server, MySQL.

EDUCATION:

Master of Science, Computer Engineering, CISE Department, University of Florida

GPA: 3.5/4.0

Courses Taken:

Database System Implementation, Analysis of Algorithms, Distributed Operating Systems, Computer Networks, Virtual Computers, Advanced Data Structures, Concurrent Programming, Principles of Computer System Design, Database Management Systems, Software Testing.

Anticipated graduation date: December 2012

Master of Technology (5 ½ years Integrated), Information Technology

Fall 2005 – Fall 2010

IIPS, DAVV, Indore, Madhya Pradesh, India.

PROJECTS:

Implementation of a Database Engine: [Database System Implementation Course] [In progress]

- The goal is to design and implement a **single-user database engine** in C++ that supports a subset of SQL and some basic relational algebra operations (select, project, and join).

Implementation and performance comparison of Fibonacci Heaps and Leftist Trees: [Advanced Data Structures Course]

- Implemented Min Fibonacci Heap and Min Leftist Tree in C++ and compared the performance metrics of the two implementations on varying input sizes under the assumption that the only permissible operations are Insert and DeleteMin.

CREW and Suzuki Kasami Broadcast Mutual Exclusion Algorithm implementation [Distributed OS Course]

- Developed a distributed implementation of Concurrent Readers and Exclusive writers (CREW) and implemented Suzuki/Kasami broadcast mutual exclusion algorithm using **Java Sockets and Multithreading**.

Reliable P2P overlay network [Computer Networks Course]

- Built a reliable P2P overlay network using **Java Sockets and Multithreading** with functionalities for peer joining a network and coping with peer churning using heartbeat technique. Message routing was implemented using Dijkstra's shortest path algorithm.

Term Paper investigating Xen Scalability with multiple processors: [Virtual Computers Course]

- Presented a term paper investigating **Xen scalability** and **virtualization overheads** with multiple processors as compared to native Linux under the load of CPU and I/O benchmarks such as GCC, SWIM and DBENCH.

Distributed and Multi Threaded Go Game Server: [Concurrent programming course]

- Implemented a distributed and multithreaded game server for "Go" game using **Java Multithreading and sockets** with multiple concurrent game clients and observers.

Distributed File System in Python: [Computer System Design Course]

- Implemented a **fault-tolerant** Distributed File System in **Python** on the lines of Microsoft's Distributed File System (Dfs) and Facebook's Cassandra based on **FUSE** providing distributed data storage functionality using **XML-RPC** protocol.

Research Project on Web Information Extraction [Undergrad]

- Implemented a **grammatical inference algorithm** to discover useful semantic knowledge from the HTML web pages. Project won the "**Best project**" award.

Others [Undergrad]

- Developed an Inventory module for MYH Government Hospital in Indore, India. The project involved .NET 2005 at the front end and Oracle 9i at the back end. Also used Crystal Reports as a reporting tool

ACHIEVEMENTS:

- Won the "**Best Project**" award for a research project on Web Information Extraction in my final year of undergrad
- Cisco Certified network Associate (CCNA)