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OBJECTIVE

Seeking a summer internship position in the area of Database systems

INTERESTS

Database systems, XML Web services, Data Mining, Data Integration

EDUCATION

- Sep 2004 – Present, Graduate Student
  Computer Science Department, University of Wisconsin-Madison
  CS764:Topics-Database Management systems, **CS640**: Introduction to Computer Networks
  CS736: Advanced Operating Systems, **CS784**: Data Models and Languages
- Sep 2000 – May 2004, B. Tech(honors) in Computer Science and Engineering
  International Institute of Information Technology(IIIT) - Hyderabad, India
  Relevant Course Work: Database Management Systems,
  Data warehousing and Data Mining, Web mining, Advanced DBMS,
  Spatial Databases, Pattern Recognition, Data structures, Computer Algorithms
  CGPA: 3.94/4.0

ACHIEVEMENTS

- 1st in the class of 150 during under-graduation
- 1st in the class of 30 during senior secondary education
- Merit scholarship by Central Board of Secondary Education for being in top 0.1% in Math
- Represented IIIT at Regional level ACM ICPC
- Dean's List I - Scholarship given for academic excellence, Fall 2001 - Spring 2004

COMPUTER SKILLS

- **Languages:** C/C++, C#, Java, Perl and Scheme
- **DBMS:** MySQL, MS SQL Server and PostgreSQL
- **OS:** Red Hat Linux**,** Windows 98/00/ME/XP
- **Miscellaneous:** OpenGL, Matlab, VRML, Lex, Yacc, CGI
- **Environments:** Visual Studio, Netbeans, GCC

EXPERIENCE

- September 2004 – Present, Teaching Assistant, UW-Madison
- January 2003 - May 2004, Teaching Assistant, IIIT-Hyderabad
  Instructor for classes in Theory of Computation, Database Management Systems and Data Mining.
- July 2002 – May 2004, Research Student, Center for Data Engineering, IIIT-Hyderabad
  Worked on projects related to Data mining, Data Integration and Web Mining
- May 2002 - June 2002, Summer Internship, CMC Ltd, Hyderabad, India
  Implemented Authentication Framework using LDAP and JAAS technologies

PROJECTS

- **WINDIK DATA INTEGRATION SYSTEM:** Designed and implemented a generic data integration toolkit that formulates queries dynamically over heterogeneous databases. Data sources can be added and removed dynamically. End user need not specify queries in SQL, or any formal query language but select the desired list of attributes and specify the filters. Queries are automatically formulated, executed at the respective sources and results are integrated and presented to the user.

- **INDIC DATA MINING TOOLKIT:** Designed and implemented an efficient framework for implementing data mining algorithms. Preprocessing techniques like sampling and normalization are embedded into the toolkit. Algorithms for Association rule mining, Clustering and classification are implemented. Data transparency between various data sources like files and DBMS is provided. Visualization techniques are provided for displaying large datasets. The toolkit was implemented by three of us and used by more than 40 students to implement various data mining algorithms.

- **MUSIC RECOMMENDATION SYSTEM:** Modified windows Media Player to automatically arrange songs into play-lists, play songs preferred by the user, and recommend new songs most likely preferred by the user. The system achieves the intended functionality with out demanding any explicit input from the user. Data mining techniques like Association rule mining is used to find user preferences and Collaborative filtering is employed to find similar users over the Internet. The songs listened by similar users and rated positively are recommended to the current user. The ratings are determined implicitly. The project is successfully deployed over the Internet.

- **IMAGE PROCESSING LIBRARY:** Designed and implemented an image processing library that exploits the MMX Architecture of the Intel processors. The SIMD instructions allow parallel processing of image data. The programs written using the library runs considerably faster than programs written in C. Basic features like scalar operations and advanced features like convolution are implemented.

- **PLUGGABLE AUTHENTICATION FRAMEWORK:** The pluggable frame work aims different authentication mechanisms to be plugged in dynamically. The JAAS architecture was exploited for the same. The mechanisms include password, digital certificates, finger printing, smart card, iris detection etc. Password authentication was implemented using JSP on Tomcat Web server. The login and password information is retrieved from Netscape directory server using JNDI.

- **CARNIVORE NETWORK TRAFFIC ANALYSER:** The tool allows the network administrator to view network traffic over multiple dimensions. The tool automatically loads the traffic from router logs using net flow tools. Features for compressing the data and automatic update are provided.