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OBJECTIVE: Seeking a full time job in software design and development.

INTERESTS: Systems Programming, Network Design and Implementation, Application Programming, Object Oriented Programming & Synchronization techniques, Web design.

EDUCATION:

- ***Masters in Computer Science*** at ***Kansas State University (Aug 2000 – December 2002)***
  - GPA – 3.4, with report topic ***"Improvising Scheduling in Linux Clusters"***
- ***Bachelor*** of Engineering in ***Computer Science*** from SardarVallabhbhai Regional College of Engg. & Tech., Surat, India. ***(Aug 1994 – Jun 1998)***
  - 79.5% (First Class with Distinction)

WORK EXPERIENCE:

Programmer / Designer (June 2002 – present) at the Knowledge Discovery in Databases (KDD) lab.
The KDD lab's research emphasis is in the areas of knowledge-based software engineering (KBSE) for decision support systems (www.kddresearch.org)

- Data modeling with Bio Informatics data. Used Rational Rose and MS-Access to design and develop UML and data models. Successfully designed complex models and relationships with 45-50 classes/ equivalent tables.
- XML Validation. Used open source XML parsers and content validators to verify XML data against DTDs.
- Development of web-based interface forms for accessing Bio Informatics Data in progress.

Webmaster/ tutor (June 2002) at the ***ARE-CNS department***, Kansas State University.

- Re-authored at least 10 web pages for web accessibility for the disabled. Made new web-based form.
- Tutored html authoring.

Webmaster (Aug 2000 – May 2002, Part-time-GRA) at the ***CIS department***, Kansas State University.

- Designed and developed at least 40 new pages. Maintenance and update of approx. 60 web pages.
- Developed web-based forms, menu based navigation bars using CGI Scripts, Java scripts.

Systems Engineer (September 1998 – June 2000) with ***M/S Tata InfoTech Limited***, ***Mumbai***, INDIA

- ***Research & Development***
  - Did Implementation in 'C' on 'Linux' of encryption algorithms like DES, Digital Signature System.
  - Studied and implemented various other symmetric and asymmetric encryption algorithms, like RSA, Blowfish.
  - Development work on IPSec technology. Studied in detail the working of various other encryption technologies, including SET.
- ***Network Design & Analysis:***
  - Design work in the area of outsourcing and off shoring of Call Centers.
  - Required tremendous amount of learning in technology, organization and management skills.
  - Did requirement analysis, vendor evaluation, market study and planning of telecom and datacom equipment, including, Automatic Call Distributors, Multiplexers, Routers, Hubs, Switches, etc.
  - Designed telecom and datacom networks, after thorough analysis of different technologies like Frame Relay, ATM, Leased Lines, VoIP, etc. The design could handle a maximum of 540 telecom and datacom nodes.
  - Studied and made reports on International data and voice connectivity.
  - The job was expanded to the whole IT-Enabled services industry, including medical transcriptions, transaction processing, web-content development & Back-office processing.
- ***Website Design &Creation:***
  - Designed the Corporate Internet Website. Also managed the development with 4 programmers.
  - The job was concluded with a refurbished corporate Internet website that had a new design and approach in 30 days.

COMPUTER SKILLS

- ***Operating Systems*** Linux, Solaris, Unix, Windows, Minix, Mac
- ***Languages*** C, C++, Java.
- ***Web skills*** HTML, XHTML, XML, DOM, JavaScript, Web Publishing Editors
- ***Sys Admin Expertise*** Installed and maintained many systems on Linux and Mac OS X.
- ***Databases*** SQL, JDBC, Oracle
- ***Technical Expertise*** Network Design, Call Center & Telecom Networks – technical & commercial, Cryptography & Encryption algorithms, Security (IPSec, SET) Web page Design and authoring.
- ***Others*** J2EE, EJB, UML, Rational Rose, Promela, Spin,

CURRICULUM

- Translator / Compiler Design
- Analysis of Algorithms
- Advanced Operating Systems
- Database Management Systems
- Real-Time Systems
- Topics in Distributed Computing
- Operating Systems Practices
- Advanced Computer Networks
- Software Engineering
- Software Management

PROJECTS DURING COURSEWORK

Compilers

- Designed and implemented a compiler for a web -based language called WIG from scratch. Modified and added features of a compiler for a language-JOOS, an object-oriented subset of Java.

Real-Time

- Implemented a Java-based Client Server program to read real-time temperature and run on a Java Embedded Machine Board.

Database

- Implemented a data warehouse using JDBC and SQL.

Networking

- Designed and implemented a Data Link Layer protocol.
- Designed and implemented a FTP type service using TCP.
- Used Promela and Spin to specify and verify various networking protocols.
- Designed and implemented a Card game in a distributed computing environment.

Operating Systems

- Studied and modified code of MINIX operating system
- Installed and used MOSIX on a cluster of Linux machines

Object Oriented Programming

- Designed and developed a chat program in Java.
- Used Rational Unified Process and designed Object Oriented programming applications that involved conditional synchronization.

Web Technology

- Installed and used web server with dynamic page serving capacity (Apache with Tomcat)
- Generated documents in XML using DOM and rendered using XSLT
- Used J2EE and EJB technology to implement business logic
- Designed and implemented handicapped accessible website with servlets for dynamic content generation.

Independent Study

- Currently working on modifying IP Tables in Linux operating system
- Doing research on improvising scheduling methods of clustering algorithms in Linux.

REFERENCES

References will be made available upon request.