RITESH JAIN

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Job Type: Full Time **Date Available: May 2001**
Areas of Interest: Networking, Security/Encryption, Multimedia, and Operating Systems Design

Education:

Master of Science (Computer Science) Graduation Date: May 2001
University of Illinois at Urbana-Champaign (UIUC). **GPA: 3.85/4.0**
B.S. (Computer Engineering) Graduated July 1999
REC Kurukshetra, India. **GPA: 73.0/100.0**

Experience:

Research Assistant Jan 2001 – present
Department of Computer Science, UIUC
- Active member of the MONET research group (details on the web page).

Summer Intern May 2000 – Aug 2000
Inktomi Corporation, Foster City, CA

Teaching Assistant Aug 1999 – Dec 2000
Department of Computer Science, UIUC
- Responsibilities included instruction of students for courses in programming in Java.
- Conducted laboratory teaching sessions and assisted students in gaining hands on learning experience.

Summer Intern Jun 1998 – Aug 1998
Bhabha Atomic Research Center, Bombay, India

Projects:
- Designing and implementing a secure multicast protocol with copyright protection in C to stream video over the network.
- Developed a video-conferencing system in C and Java as a class project in a team of five.
- Integrated SOAP with Jini/RMI to take the JVM load off the clients who cannot support it.
- Developed software in VJ++ to import external profile data from portal's database to Inktomi's database.
- Wrote filters in VC++ to pull html pages and images from the merchants' websites to Inktomi's database.
- Implemented various framing techniques in TCP like fixed-length, variable length, sentinel-based etc. in C on Solaris platform.
- Implemented a reliable file transfer protocol in UDP by putting a new layer on top of the regular UDP layer (used CRC, and 2-D parity checking).
- Implemented a bulletin board in TCP with the capability of transferring files and sending remote commands.
- Simulated the various features of an Operation System like virtual memory, synchronization, file systems, deadlocks etc on the baseline nachos operating system.
- Developed software in C to define and represent solid objects in memory as 3-D array of bits and modules to perform various operations like translation, rotation, intersection etc. on them, and then to display them in isometric and orthogonal views.
- Developed a Chart Master in C++ to display various forms of charts like Bar Charts, Pie Charts, Line Charts etc. depending upon the given data.
- Developed a user-friendly, menu-driven, text-editor in C for the Unix environment on the lines of the Turbo editor in DOS.
- Developed an interactive computer game called Rattle-Race in C++.
- Developed animation in Java to show the structure of paged-segmentation for virtual memory in various Operating Systems.

Awards and Honors:
Recipient of the **National Talent Search Scholarship** awarded by the Government of India.

Software Skills:

Programming Languages:	C, C++, Java, VC++, VJ++, XML, HTML, SQL
Platforms:	UNIX (Solaris 2.5.1), Windows 9x/NT v4.0
Networking:	TCP/IP, UDP, Unix Socket Programming
Distributed Systems:	RMI, JINI, SOAP

Courses Completed:
Communication Networks for Computers, Multimedia Systems Design, Computer Networks & Distributed Systems, Operating Systems Design, Combinatorial Algorithms, Logic Design and Switching Theory, Design and Construction of Distributed Object Component Systems.