

## MOHIT GUPTA

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### OBJECTIVE

A challenging job that will leverage the research and development experience I have gained during my education and internships.

### EDUCATION

Year	Qualifications	Institute/University	Major	GPA
Expected July, 2004	M.S in Computer Science	University of California, Davis	Computer Networks	3.97 /4.0
May, 2002	B.Tech (Honors) in Computer Science & Engineering	Indian Institute of Technology, Kharagpur, India	Computer Science	8.32/10.0

### SKILLS

- Languages: C, C#, C++, VB .Net, Java, Visual Basic.
- Operating System: Windows, Digital Unix, Linux
- Software Tools: Visual Studio .NET, Source Depot, Product Studio, SCCS, NIST Net, OpNet, Lex, Yacc, Bison
- Databases: SQL 2000, Microsoft Access

### WORK EXPERIENCE

- July 2003 – Sep 2003, Software Design Engineer in Test Intern in Indigo Group, Microsoft Corporation, Redmond, WA  
Implemented a Protocol Provider and a Resource Manager in C# to test Pluggable Protocol Layer (PPL). The Protocol Provider interacted with the PPL, the Transaction Manager and the Microsoft Distributed Transaction Coordination Service (MSDTC) to initiate and commit a transaction. The application was written in managed code and used Microsoft messaging system “Message Bus” for communication. All the test cases were automated and were ran using the Test Execution Framework.
- March 2003 – June 2003, Freelancer, Software Engineer, Visual Advertising and Sales Technology (VAST), Sacramento, CA  
Worked as a freelancer for a startup company VAST. Implemented a GUI based application using .Net Framework to automate the existing manual cable systems management into a highly efficient Operations Support System. The application provided its users a simple and highly efficient interface to search the free advertisement slots and advertise coordinators about them. As a part of the project a mailing service was built that sends the current information as requested by the client. The template, time and the frequency of the mail all can be customized as per needs.

- May-July 2001, Summer Intern, i2 technologies, Bangalore (India).  
Designed and implemented test cases for i2 core product “Trade Matrix”, a Supply Chain Management (SCM) tool, and coded various perl scripts for the execution of Trade Matrix. All the test cases were automated and were built using the automation framework used in i2.

## **TEACHING EXPERIENCE**

- January 2003 – June 2003, September 2003 – Till Date, Teaching Assistant for Computer Networks at University of California, Davis, CA
- September 2002 – December 2002, Teaching Assistant for Software Engineering at University of California, Davis, CA

Job responsibilities as a Teaching Assistant included holding discussion sections, holding Office Hours, maintaining newsgroup, correcting answer scripts, taking project demonstrations and maintaining class roster

## **PROJECTS**

- Working on Vehicular Adaptive Networks for providing Traffic Control, and seamless connectivity with the internet to the vehicles.
- Compared the performance of SCTP with TCP in infrastructure based wireless networks and ad hoc networks for different protocol parameters.
- Implemented an adhoc network called Lunar and compared the performance of the network with respect to various parameters.
- Network Optimization using Genetic Algorithm (B.Tech Major Project). Multi objective Genetic Algorithm was used to optimize the average delay and the network installation cost taking reliability and flow as a constraint.
- Designed and implemented an airline reservation system. Two phase commit protocol was implemented as a part of the project.
- Designed and implemented a chat server and client application in C# using .net Remoting and callback delegates.
- Implemented an image database using .NET platform. C# was used to design the front end and SQL 2000 was used as the backend database server.
- Implemented a compiler for a subset of C language.

## **AWARDS/SCHOLARSHIPS**

- Awarded Fellowship for two consecutive years at University of California, Davis.
- Among the top 0.2 % of about 2,00,000 students who appeared in Joint Entrance Examination, India in 1998.
- Ranked 32<sup>nd</sup> out of about 1,00,000 candidates in Delhi College Entrance Examination, India.
- Among the top 8 teams that qualified the Microsoft .Net Campus Challenge Zonal round.
- Certificate of Merit in National Physics Olympiad held in India.
- Certificate of Merit in National Mathematics Olympiad held in India.
- Ranked 47<sup>th</sup> in National Scholar Talent Search Examination held in India for excellent performance in Secondary examination.

## **PUBLICATIONS**

Topological Design of Communication Networks using Multiobjective Genetic Optimization, Kumar, R., Parida, P., P. and Gupta, M in proceedings of IEEE Congress on Evolutionary Computation 2002 held in Hawaii, USA.