Objective	To secure a full time position as a Systems/Software Engineer to enhance my technical skills.		
Education	North Carolina State University - Raleigh, North Carolina		
	Master of Science – Computer Engineering GPA: 3.6/4.0	May 2002	
	Bombay University, Thadomal Shahani Engineering – Bombay, India		
	Bachelor of Engineering in Electronics (First Class with Honors).	May 1999	
	CMC Institute – Bombay, India.		
	UNIX SUN Solaris Administration Certification	June 1999	
Skills	<ul> <li>Programming languages: C, C++, Java Technologies, Perl, Pascal, Unix Network Programming.</li> <li>Databases: IBM-DB2, Oracle Enterprise Server 9i, MSDE2000.</li> <li>Operating Systems: Windows (NT, 2K Pro &amp; Server, etc), Sun Solaris, AIX (4.3.3,5), Linux, MSDOS.</li> <li>Networking: TCP/IP suite, ATM, Frame Relay, MPLS, Broadband tech, Network Management, Network Security.</li> </ul>		
	• Wireless: Physical Layer Concepts, 2G, 3G, Mobile IP, Wireless TCP/ATM, Satellite system Local Loop (WLL), WLANs, Blue tooth, WAP.	ireless: Physical Layer Concepts, 2G, 3G, Mobile IP, Wireless TCP/ATM, Satellite systems, Wireless cal Loop (WLL), WLANs, Blue tooth, WAP.	
	• Other: Web sphere Application Server 4.0, Apache Web server, IBM HTTP Server, MS Off 2000, SAS JUMP, Visual Slick Edit, GNU/GDB, CMVC, NSA, NESSUS.	ïce/Project	
Experience	IBM, Research Triangle Park (Coop Software Dev Programmer- Security Software Products)		
	June2002-Present.		

# • Unit testing of the IBM Tivoli Risk Manager 4.1

- Installed, Configured & Troubleshooted IBM Risk Manager v4.1Server/Tivoli Enterprise Console/Tivoli Management Framework on multi platforms (Windows NT & 2000, Solaris, Aix, Linux) using different databases (DB2 7.2 EE, Oracle 8i & 9i, MS SQL Server) and IBM Http Server (for Web Based Information Facility). Verified System hardware requirements, Installed & configured operating system prerequisites.
- o Installed/Administered DB2, Oracle and SQL Server on Windows/UNIX Platforms
- Performed migration from earlier versions of IBM Tivoli Risk Manager systems to V4.1.

# Software Development/FVT for the Risk Manager 4.1 Adapters

- Checkpoint Firewall Adapter: Setup the Checkpoint Next Generation Firewall on a Solaris 8 Platform as the Event Source (Sensor) and the Checkpoint Adapters on UNIX/WINDOWS platforms. Had to perform a stress test by running an NSA/NESSUS Scans on the Firewall. Also had to test its functionality and confirm its ability to send events to the TEC server using the Risk Manager Event Integration Facility API.
- Cisco IDS: Setup/Testing of the Cisco IDS Adapter on Multiple platforms (UNIX/Windows). Had to perform a stress test by running an NSA/NESSUS Scans on the Cisco IDS Sensor. Also had to test its functionality and confirm its ability to send events to the TEC server using the Risk Manager Event Integration Facility API.
- ISS Real secure Adapter: Installed the ISS Real secure Network Sensor 7.0, Server Sensor 6.5 and ISS Workgroup Manager on a Windows Platform. Updated the signature files for ISS Real secure adapter to the latest Xpress Update Level (Signature Level). Installed the Tivoli Enterprise Console SNMP Adapter. The TEC SNMP adapter is used by ISS to send events to the TEC server through Risk Manager Java based agent/client. Also tested this adapter using the Tivoli Net view 6000 SNMP adapters.
- Wrote a JAVA tool for automatic signature generation for the ISS real secure adapter from the list of signatures available in the latest Xpress update (XPU).
- Testing of IBM Risk Manager Server task functionality that is used to execute tasks on the Client machines using the Tivoli Management Environment. Found bugs in the TTT/Perl code and made fixes for the bugs.

- Software Testing/Setup (FVT) of the IBM Java Collector Project (JAC) Server and JAC Admin GUI 4.0.
  - 0 Installed, Configured & Tested IBM JAVA Collector (Health Check) Server on AIX 4.3.3/5.2 using IBM DB2 UDB EE 7.2(FP8).
  - Installed & configured operating system prerequisites. 0
  - Wrote Test Cases for the Server/Admin GUI functionality & the JAC Servers SSL 0 communication with the JAC Client in the TTT Database.
  - Currently testing the test cases and setting the execution records. Opened Defects for the 0 server functionality using CMVC.

# North Carolina State University (Research Assistant - ECE dept)

January 2001-May2002

- Research Project on Proactive Intelligent Network Fault Management using Computational Intelligence (CI) with Nortel Networks (RTP and Ottawa R&D)
- Designed/Implemented a prototype intelligence model/software for the Nortel DMS 100 switches and the Succession family (Passport 15000 ATM Switch, MG4000) based on Computational Intelligence techniques using MATLAB/SIMULINK toolboxes, C, C++.
- Performed statistical analysis of the switch data using JMP4.0 by SAS.

#### Global Tele systems Ltd, India (Engineer-Networking Group) August 1999 - July 2000

- Designed and implemented a frame relay VPN for General Electric-ASIA & Price Water House Coopers ٠ (India)
- Configured/Monitored the Nortel Passport ATM Switch 6480, Bay BCN/BLN routers, Cisco2500/7000 series routers based on the customers network design.
- Installed the Nortel Magellan NMS (ATM Switch NMS) on a Solaris 2.8 platform & the HP Openview/Nortel Optivity on a Windows 2k platform (router NMS). This was used for Centralized Network Management and End-to-End router Management (to Customer Premises).

### Interconnected Stock Exchange Of India Ltd. (Intern-NMS software) March 1998 -April 1999

- Studied and documented all network devices and interfaces in their nationwide VSAT WAN. This involved ٠ understanding/ configuring the Motorola Satellite VG320 Router/Compaq Tandem Mainframe server.
- Designed, implemented and deployed both the centralized and decentralized versions of a network • monitoring and management system software using Visual Basic 6.0/Microsoft Access.
- Courses Computer Networks, Internet Protocols, High Speed Networks (ATM & MPLS), Broad Band Internet Technologies (X.DSL), Network Security, Project Management, Wireless Communications, Advanced Computer Architecture, Wireless/Mobile Networking, Java Programming, Operating Systems and Independent Study on Network Management in TCP/IP networks.

Course

Simulated a Dynamic Branch Predictor (bimodal, gshare and a hybrid branch predictor).

Projects

- Cache Simulation that models a memory hierarchy with a L1 cache and an optional Victim cache. •
- Simulated an out of order (OOO) Super scalar processor based on Tomasulo's algorithm that • fetches/issues N instructions per cycle. The dynamic scheduling mechanism was modeled in detailed.
- Simulation of the ATM Adaptation Layer (AAL2) in the ATM stack & the GCRA algorithm. .
- **UDP Transport Protocol**: Design and Implementation of a **Simple Reliable Transport Protocol** (SRTP), providing FTP and Chat applications, built over UDP to provide TCP like reliability, flow and congestion control.
- Implementation of a prototype RSA public key algorithm and DES secret key algorithm. .

Activities & Interests

- Member IEEE-Communications Chapter (97-00): Organized & participated in various IEEE events in Mumbai.
- Member of "MAITRI-The Indian Student Association" at North Carolina State University.