

**NAME****Address ~ City, State Zip ~ Telephone: ~ Email****PROFESSIONAL INTERESTS**Wireless Networks  
Satellite Communications  
Signal ProcessingNetwork Security and Administration  
Programming  
GIS**EDUCATION****Master of Electrical & Computer Engineering** GPA: 3.5/4.0  
University of Delaware, Newark, DE  
Thesis: *Detection of Agent Replay and Denial of Service Attacks in Wireless Networks*  
Graduation: Aug. 2004**Bachelor of Electronics & Communications Engineering** GPA: 3.8/4.0  
Osmania University, Hyderabad, India  
Graduation: July 2001**COMPUTER SKILLS**Programming Languages: C, C++ Java, Perl, Python, Visual Basic  
Operating Systems: Linux, Windows NT/Xp, Solaris, Unix  
Applications: MATLAB, Maple, LATEX  
Security: Java Cryptography, JVM Security, PKI, SSL  
Web: HTML, Dream Weaver MX, Flash, Fireworks, Photoshop  
GIS: ArcGIS, Arcview, Network, Spatial and 3D Analysts**ENGINEERING EXPERIENCE**  
May '04-Present**Intern**, Delaware Center for Transportation, Newark, DE  
Working as System Support Engineer for Applications of GPS system to Travel Time & Delay  
*Tasks include:*

- Data Collection of Traffic on all roads in the State of Delaware
- Travel Time and Delay Measurement Analysis using GIS Software and Visual Basic
- Design of the Delaware Center for Transportation's website: [www.ce.udel.edu/dct](http://www.ce.udel.edu/dct)
- Authored a Technical report, "Application of GPS System to Travel Time and Delay Measurements"

Jan '02-May '04

**System Administrator**, E-Media Lab, University of Delaware, Newark, DE  
Worked as Systems Administrator of E-media Lab at the Department of Electrical Engineering  
*Tasks include:*

- Maintenance of the server and the systems (Hardware)
- Trouble shoot network related hardware and software problems
- Acquired experience in working with various Operating Systems
- Gained experience in working as a Team and Leading a dynamic group

**RESEARCH EXPERIENCE**  
Jan '02-May '04**Graduate Research Assistant**, University of Delaware, Newark, DE  
Performed innovative research to eliminate security latencies in wireless networks  
*Tasks include:*

- Design and Analysis of New Authentication Modules for Wireless Network
- Authored a paper titled, "New Authentication Tags for Wireless Networks"
- Gained experience in working in a wireless environment
- Gained sound knowledge in Programming in various languages like Java, Perl

**INTERNSHIP EXPERIENCE**  
Sept '00-June '01**Project Trainee**, Apollo Micro Systems, Hyderabad, India  
Worked as a Project Trainee for the design of Voice Band Classifier Card Using ADSP  
*Tasks include:*

- Design and implementation of Signal Analyzers using ADSP 21060
- Authored a Technical Report, "Implementation of Voice Band Classifier Card"
- Gained sound knowledge in Micro Processors and Micro Computing

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## PROJECTS AND PUBLICATIONS

**PROJECTS***GPS & GIS*

- Development & Analysis of Traffic Patterns through the State of Delaware using the Global Positioning System.
- Data Collection, Analysis and Grading of Level of Service Using the Aspen and ArcGIS software.
- Development of a GIS interface in Visual Basic for the automation of processing the data

*WIRELESS NETWORKING*

- Analyzed and designed “*Interplanetary Sensor Network*” a wireless sensor network communicating in deep space.
- Application of various design patterns of cellular & satellite communication systems.

*WIRELESS SECURITY*

- Detection of Denial of Service (DoS) and Agent Replay attacks in Wireless Networks
- Designed and developed a new Authentication Module for Wireless Networks using the message authentication codes.

*OPERATING SYSTEMS*

- Designed a Network Interface for an operating system-using internetworking and operating system concepts.

*DIGITAL SIGNAL PROCESSING*

- Designed and developed a “*Signal Analyzer for Voice Band*”, using ADSP 21060 processor project funded by DRDO, India.

**PUBLICATIONS**

## TECHNICAL REPORT

- “Application of Global Positioning System to Travel Time and Delay Measurements 2004”, a technical report submitted to Delaware Department of Transportation, Dover, Delaware

## CONFERENCES

- Charles Boncelet, (name), “Two new Authentication tags for Wireless Communications”, accepted by *GLOBECOM 2003*.
- Charles Boncelet, (name), “Detection of Denial of Service and Agent Re play in Wireless Networks”, presented at *MILCOM 2003*.

## THESIS

- “Detection of Denial of Service and Agent Replay in Wireless Networks” Masters’ Thesis submitted to the Department of Electrical and Computer Engineering, *AUG 2004*.
- (Name), *V.M. Rao*, “*Channel Estimation of Rayleigh Fading Channel*”, accepted and presented *ISTE Communications Symposium, New Delhi, 2001*.

**Awards and Professional Recognition:**

- Member of IEEE and the Delaware Academy of Science.
- Event Organizer of IGSA (Indian Graduate Student Association), University of Delaware
- Elected for the post of *The President*, ISTE Students’ Chapter, India during the year 2000-2001.
- Elected for the post of *The General Secretary*, ISTE Students’ Chapter, India during the year 1999-2000.
- Selected as *The Central Coordinator* for Navachaitanya ’99, a national level technical symposium on the advances of science and technology in India.
- Facilitated as the *Best Student Editor* for the year 2000 by Fluxtron-an official magazine for the Department of ECE, Osmania University, India.