

SRIKRISHNA GUTTA

2200 Waterview Pkwy #30210

Richardson, TX -75080, USA

Mobile : (469) 358-5586

Email: srikrishna.gutta@gmail.com, guttasri@gmail.com

Objective:

Looking ahead to pursue a Full-time position as an engineer, in a capacity commensurate to my education and skills.

Education:

Masters of Science in Telecommunication Engineering (MSTE),
The University of Texas at Dallas (UTD), Richardson, TX -75080, USA

GPA: **3.5 / 4.0**

Graduation date: December 2005

Bachelors of Engineering in Electronics and Telecommunications (B.E in EXTC),
University of Mumbai (formerly University of Bombay), India

GPA: **3.8 / 4.0**

Under-graduation date: June 2002

Areas of Interest:

Wireless Communications, Computer Networks, Wireless Programming/Software Development.

CourseWork:

Algorithmic Aspects of Telecom Networks: *Network modeling, budgeting, & analysis of designed network*

Advanced Computer Networks: *TCP/IP, SCTP, RIP, OSPF*

Database Design: *ORACLE 8i, JAVA, XML*

Telecommunication Management Networks: *Maintenance of telecom networks & related performance issues*

Performance of Computer Networks: *Markov Chains, Queuing*

Mobile Computing Systems: *Wi-Fi, MANETS, Bluetooth*

Intro to Wireless Communications: *GSM, CDMA, Diversity*

Digital Communications: *Modulation techniques*

Real Time Systems: *VxWorks OS, Scheduling periodic & aperiodic processes*

RFID & Sensor Networks: *RFID tags, Tag communication, Sensor node deployment using MoteView.*

Skill Set:

OS: Windows 98/2000/XP, Linux, Unix, Solaris, Mac OS

Languages/Scripting: C, C++, Perl, XML, JAVA

Protocols: TCP/IP, UDP, Routing Protocols (RIP, OSPF), H.323, SIP

Tools & Utilities: MATLAB, MS Office, TTCN, QUIP, Tomcat Server

Databases: Oracle 8i, MySQL

RTOS: Knowledge in VxWorks

Wireless: Knowledge in GSM, Bluetooth, 802.11a, 802.11b

Research Work @ UTD - (Jan' 04 - Dec' 04):

Mobility of sensor nodes in Wireless Sensor Networks:

- Design & incorporate Wi-Fi or Bluetooth technology into mobile/static sensor nodes for communication with mobile phones (acting as gateways for information transfer).
- Effects of packet loss, shadowing, and path loss were studied on standalone Wireless Sensor Network with just one node being made mobile (*Random Waypoint Model*).
- Scripted in C++ on the Linux platform; performance charts were plotted in MATLAB.
- Study of Bluetooth & 802.11a/b; sought one suitable for communication between mobile & static node.

Internship/In-house project (Jan'02 – May' 02):

- **Implementation of Link Access Procedure - D (LAPD) channel protocol (LTTL, India):**
 - Study of the ITU-T Recommendations Q.921 and Q.920.
 - Flow diagrams were drawn for a section of the protocol & later implemented using C.
 - Conformance testing of code was conducted using Tree and Tabular Combined Notation (TTCN).

Educational Experience/Projects:

- **Simulating the Stream Control Transmission Protocol (SCTP) stack with priority schemes:**
 - Study effect of varying bandwidth & packet loss in the network using SCTP instead of TCP.
 - Created necessary libraries for the simulation in C++ & carried out on UNIX platform.
- **Implementation of Minimum Weight Spanning Tree algorithms:**
 - Modified Kruskal algorithm & Sharma-Bardhai algorithm were implemented using **JAVA**.
 - Network implemented spanned 25 nodes with varying cluster sizes (3, 6, & 9) for each run of algorithms.
- **Database Design:**
 - Design a conceptual schema using the (E) ER Data model & incorporate this schema into an OR-DBMS.
 - Running queries on the OR-DBMS which stored information about cell phone calls provided by different wireless service providers.
- **XML Project:**
 - Design an XML Schema, XML Stylesheet and use Xquery to query on XML data.
 - The Sun Multi-Schema XML validator was used for XML Validation.
 - Use of QUIP for running the Xquery.
- **Web Based Search Engine:**
 - Developed a search engine to facilitate access to all the movies available in university movie database.
 - Project uses JDBC to connect to the **Oracle** database, **JAVA** Swing to implement the user - interface.
 - Project involved using methods of the ResultSet class.
- **Event driven Simulation:**
 - Simulation & analysis of the M/M/n/k queuing model & closed queuing networks.
 - Throughput & utilization were measured. Coded in C++ on UNIX platform.
- **Train Control System:**
 - Motion of two trains along tracks (common sections of track present) using cyclic scheduling with external inputs to the system being traffic lights, & human actions.
 - GUI and scheduling part was coded in **JAVA** on Windows platform.

Professional Associations/Honors:

- Institution of Electronics & Telecommunications Engineering (*IETE*), India.
- Chief Event Coordinator of Indian Student Association (ISA-UTD) event: SANGAM (2004-2005).
- Nominated to Who's who awards (nominated by Dean's Office) selection committee at UTD, USA.

Visa Status / Availability:

F1 / Immediate

References:

Available Upon Request