Muhammed Adnan Choudhury

2811 Brigadoon Drive, Apt. # 24, Phone: (919)986-1420
Raleigh, NC-27606, USA Email: machoudh@ncsu.edu

OBJECTIVE

Looking for a challenging **summer (2009) co-op** position as a software engineer where I can apply as well as enhance my technical knowledge and problem solving skills.

EDUCATION

PhD (August 2007-Present, Expected May 2012)
Department of Computer Science, North Carolina State University.

Masters in Computer Science (August 2007-Expected August 2009)
Department of Computer Science, North Carolina State University.

B.Sc. Engineering (June 2005)
Computer Science & Engineering, Shah Jalal University of Science & Technology, Bangladesh

EXPERIENCE

Teaching Assistant, Dept. of CSC, NCSU (August 2007-Spring 2009)
Course Assisted: *Programming Concepts-**Java**, **Internet Protocols**, **Design and Analysis Of Algorithms***.
Duties included grading, course material development, and project supervision.

Lecturer, Dept. of CSE, Stamford University Bangladesh (September 2005-August 2007)
Courses Taught: ***Digital Signal Processing, OOPI (C++), OOPII (Java)*.**

TECHNICAL SKILLS

Programming languages: C/C++, Core Java, J2EE, C#, PHP
Simulators: MATLAB, OPNET, NS-2, Omnet++, CPlex, PSpice
DBMS: Proficient in Oracle, MySQL, MS Access.
Protocols/Standards: TCP/IP, ATM, SONET, SDH, UDP.

SELECTED PROJECTS

- (Ongoing) Using non-intrusive bandwidth estimation to **improve congestion control** in TCP/IP and analyzing the performance.
- Developed a method for **Obtaining City-Level Maps** for ISPs using efficient number of traceroutes and *cycle reduction algorithm.*
- Simulation of **Diffserv** as a QoS model.
- Developed **Cryptographic Vote Storage Method** with history hiding and subliminal-freeness.
- Developed **RSTP** (Really Simple Transfer Protocol) over UDP introducing **reliability features** of TCP.
- **ATM Adaptation Layer** Simulator.
- Developed a **De-noising Technique for the Canadian National (CN) Tower Lightning Current Derivative Signal.**
- Designed a **100 Gbps Fiber Optics Network** spanning over five districts in Bangladesh.
- Designed and developed a **complete database system** for the entire admission process of the university using Oracle 8.0i for the back end and Developer 6.0 for the front end.
- Developed **"IVETE"**, a feature-rich yet light-weight text editor, **following rigorous Software Engineering Development Cycles** and **proper Documentations**.

RELEVANT COURSES

Graduate Level Courses:

-Design and Analysis of Algorithms
-Survivable Networks
-Optical Networks
-Database Management Systems
-Advanced Internet Protocols
-Connection Oriented Networks
-Network Security
-Computer Performance modeling (Queuing Theory)

Under-Graduate Level Courses:

-Software Engineering
-Artificial Intelligence
-Operating Systems

SCHOLARSHIPS

Three time recipient of **Annual University Scholarship for Merit** at Shah Jalal University of Science & Technology.