SHARAD SAHA

3009 University Avenue
Apt# 303, Madison, WI – 53726

Email: sharad@cs.wisc.edu
Phone: +1-408-612-1864

EDUCATION

Bachelor of Technology — **2000 - 2004**

Institution	Indian Institute of Technology, Guwahati
Major	Electronics and Communication Engineering
CPI	8.60 / 10.0

Masters — **August 2006 – May 2008**

Institution	University of Wisconsin, Madison
Major	Computer Sciences
G.P.A	3.9 / 4.0

WORK EXPERIENCE

Samsung India Software Operations, Bangalore, India — **July 2004 – July 2006**

Senior Software Engineer

- Developed a Multimedia Ring back Tone Gateway (MRBT). The purpose of the MRBT system was to play the ring back tones or announcements to the mobile users who initiated the call using H324M.
- Implemented a Megaco parser for both ABNF and ASN syntax. The parser was deployed in a Multimedia Gateway (MGW) used for PSTN to IP traffic conversions.
- Was involved in the design for security support in a Front Node System (FNS). FNS is a core network component used to distribute the IMS traffic. Security support is provided by establishing Security Associations according to IKE.
- Was involved in the design, coding, integration and testing of Multimedia User Agent (MMUA). MMUA is a SIP based user agent for IP Multimedia System Core Network, which supports both audio and video sessions.
- Was the sole representative from Samsung, India for integration and testing of the Multimedia Ring back Tone, FNS projects at Samsung Headquarters, South Korea

INTERNSHIP AND PROJECTS

Summer Intern, Korea University, South Korea — **May - July 2003**

- Developed a test bed to demonstrate the concept of Link State Routing (OSPF). The topological metrics included a link going down or change in traffic load. The shortest path was calculated using the Dijkstra's shortest path

Summer Intern, Cisco Systems, SanJose, USA — **June - August2007**

- Developed a SNMP based tool for network management of the outdoor mesh. This tool was used to analyze the client distribution on one of the deployed and operational outdoor mesh and we suggested ways on improving the end throughput experienced by the clients

Undergraduate Student(Senior Thesis), IIT Guwahati

- Proposed a novel context aware seamless handover scheme for local mobility in next generation IP networks. The proposed scheme considered the bandwidth requirements of applications and the load of access networks in order to make the most suitable handover decision. The registration delay was reduced by using hierarchical topology, packet losses were minimized by introducing packet buffering at the Mobility Anchor Point (MAP) using tunnel buffering. The work has been accepted at CISSE, Bridgeport, USA.

Graduate Student, University of Wisconsin, Madison — **Aug 2006 - present**

- Cut through forwarding in Wireless Mesh networks. In this project we devised a scheme to reduce the end to end latency of UDP/TCP traffic between multiple nodes in Mesh networks.
- MAR (Mobility Access Router) – In this project we proposed a solution for internet access on buses and trains using Wifi and Wide Area Networks.

HONORS AND AWARDS	• Placed in the top 0.2% out of around 2,00,000 candidates appearing for IIT-JEE, 2000. • Awarded cash bonus for exceptional work at Samsung Electronics for the module MRBT. • Awarded a certificate for being amongst the top 0.01% students throughout India in Mathematics in Class X by the Central board of Secondary Education, India.

PUBLICATIONS	▪ Sharad Saha, Akhilesh Gupta, Mithilesh Kumar, "A hierarchical approach for reducing delay and packet-loss for handoff in MIv6 Network", Accepted, International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering, Bridgeport, USA,10-20 Dec 2005. ▪ S. Rayanchu, D. Agrawal, S. Saha, A. Mishra and S. Banerjee," Deconstructing Wireless Errors: Collision or 'Bad' Channel?", Mobicom 2007 ▪ Mithilesh Kumar, Sharad Saha, Akhilesh Gupta, "An Approach to Adaptive User Interfaces using Interactive Media Systems", accepted at International Conference on Intelligent User Interfaces 2006, Sydney, Australia 29Jan – 1Feb 2006.

SKILLS	*Programming Languages*	C/C++, Java, Socket Programming, SQL
	Algorithm Development	MATLAB
	Operating Systems	Linux / Unix, Windows
	Network protocols	H324M, H.248, SIP, TCP/IP, IPSec

RELEVANT COURSES	Mobile and Wireless Networks, Operating Systems, Advanced Networks, Database Management Systems, Communication Networks, Mobile Communication, Principles of Communication, Digital Communications

Expected graduation Date: May 2008