

MUHAMMAD ASADUR RAHMAN

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EDUCATION AND EXPERIENCE

DEGREES

Doctoral degree and year: Ph.D., 2000

Institution: Illinois Institute of Technology, Chicago, Illinois

Major Field of Study: *Computer Science*

Master degree and year: M.S., 1990

Institution: Roosevelt University, Chicago, Illinois

Major Field of Study: *Computer and Information Science*

Bachelor degree and year: B.S., 1983

Institution: Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

Major Field of Study: *Chemical Engineering*

TEACHING EXPERIENCE AT THE UNIVERSITY LEVEL

Academic Positions

2007-Present Associate Professor, Department of Information Technology, Clayton State University, Morrow, Georgia

2002-2007 Assistant Professor, Department of Computer Science, University of West Georgia, Carrollton, Georgia

2001-2002 Adjunct Faculty Member, Department of Computer Science, Illinois Institute of Technology, Chicago, Illinois

2001-2002 Adjunct Faculty Member, Stuart School of Business, Illinois Institute of Technology, Chicago, Illinois

1987-1988 Teaching Assistant/Grader, Department of Mathematics, Roosevelt University, Chicago, Illinois

Courses Taught

Clayton State University

ITFN 4800	Topics in IT – Introduction to Bioinformatics
ITNW4502	Secure Networks and Communication Protocols
ITFN2511	Intermediate Networking and Security
ITFN 2123	Information Technology Project Management
ITFN1501	Foundations of Networking and Security
CPTG2201	Advanced Computer Applications
ITFN 1101	Foundations-Information Technology

University of West Georgia

CS 1300	Introduction to Computer Science
CS 1301	Computer Science I
CS 1302	Computer Science II
CS 3100	Computer Organization and Architecture
CS 3260	Net-Centric Computing
CS 3270	Intelligent Systems
CS 4983	Topics in Machine Learning
CS 6211	Comp. Architecture/Machine Organization I
CS 6261	Computer Networks I
CS 6262	Computer Networks II
CS 6985	Topics in Bioinformatics
CS 6900	Graduate Project
UWG 1100	Space Science
UWG 2100	CSI: UWG

Illinois Institute of Technology

CS 550	Comparative Operating Systems
ECOM 572	Internet Application Developments

PROFESSIONAL NON-TEACHING WORK EXPERIENCE

Chicago Stock Exchange, Chicago, Illinois, 1989 – 2002

Systems Analyst, Trading Systems Development

- Work in the design and development of securities trading applications and held progressively responsible positions that included project team leading and software project management.
- Designed and developed the object model for the stock exchange's Odd Lot Execution System (OLES) client interface and developed the server side software for this system.
- Led a project team to develop Windows based PC interface to the Stock Exchange's trading engine for off-site order entry and routing.
- Developed software for the primary routing system of the Stock Exchange called Multi-Application Routing System (MARS). Wrote the user interface of the application and implemented real-time update when data is received from various nodes.

- Led the design and development of the exchange’s rule-based application monitoring system called Intelligent Monitoring Systems (IMS) to monitor different trading applications running on various servers in a networked environment.
- Developed applications for heterogeneous platforms: VMS, UNIX, and Windows operating systems. Language platforms used: C++, Java, C, and VAX BASIC, platform using VAX BASIC, VMS run-time libraries, VMS system service calls and DECnet Networking Protocols.

LASHCO Inc., Chicago, Illinois, 1988 – 1989

Programmer, Trading Applications Development

- Designed and developed new application software for securities trading and order routing systems; maintained existing applications of a securities brokerage firm.
- Wrote software for the company’s Trading Interface Link to New York Stock Exchange’s SuperDot Trading System.
- Developed applications for VAX-VMS platform using VAX BASIC, VMS run-time libraries, VMS system service calls and DECnet Networking Protocols.

Alumni Office, Roosevelt University, Chicago, Illinois, 1987 – 1988

Programmer (part-time), Alumni Office

Public Administration Computer Center, Bangladesh Secretariat, Dhaka, 1984 – 1987

Programmer, PACC

Bangladesh Chemical Industries Corporation, Dhaka, Bangladesh, 1983 – 1984

Chemical Engineer, Planning Department, Polash Urea Fertilizer Factory

FIELDS OF INTEREST

Open-ended Question Answering System, Named Entity Recognition and Extraction, Classification, Machine Learning, Bengali-English Machine Translation, Bioinformatics.

INNOVATIONS IN TEACHING

- Introduced Lego Robot programming in freshman course: UWG 1100 – Space Science

INTELLECTUAL CONTRIBUTIONS

REFREED JOURNAL PUBLICATIONS:

1. **Rahman**, Muhammad Asadur, and Evens, Martha W. “Categorizing Dictionary Information for a Lexical Database of Proper Names. Dictionaries,” *Journal of the Dictionary Society of North America* 27 (2006): 36-82.

REFREED PUBLICATIONS IN CONFERENCE PROCEEDINGS:

1. Akhtar, Shakil, and Muhammad Asadur **Rahman**. 2009. Classroom Projects to Support E-Learning in Computer Networks and Security. In Proceedings of the First Kuwait e-Conference on e-System Services, November 17-19, 2009, Kuwait City, Kuwait.
2. Qu, Junfeng, Muhammad Asadur **Rahman**, Yinglei Song, Lei Zhu, Yong Wei, Weihong, Hamid R. Arabnia. 2009. PaperGuard: A Support Vector Machine Approach for Screening Machine Generated Papers. In Proceedings of the International Conference on Information & Knowledge Engineering (IKE 2009), July 13-16, 2009, Las Vegas.
3. **Rahman**, Muhammad Asadur, Sunitha Patel, and Martha Evens. 2009. Automatic Recognition and Extraction of Geographic Named Entities from a Machine Readable Dictionary. In Proceedings of the 20th Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-2009), April 18-19, Fort Wayne, IN.
4. Bullington*, James, Endres*, Ira, and Muhammad Asadur **Rahman**. 2007. Open-Ended Question Classification Using Support Vector Machines. In Proceedings of the Eighteenth Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-2007), April 21-22, Chicago, IL.
5. Adams, Blake, and Muhammad Asadur **Rahman**. 2006. Transductive Support Vector Classification for RNA Related Biological Abstracts. In Proceedings of the IEEE International Conference on Granular Computing (GrC'06), sponsored by IEEE Intelligent Systems Society. May 10-12, 2006. Atlanta, Georgia.
6. Hix*, Anna Leslie, **Rahman**, Muhammad Asadur, and Martha Evens. 2006. Discovering Lexical-Semantic Relations from the Person Name Entries of a Machine Readable Dictionary. Proceedings of the Seventeenth Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-2006), April 1-2, Valparaiso, IN, pp. 6-11.
7. **Rahman**, Muhammad Asadur. 2005. Learning in Computer Science: Assessment and Evaluation of Undergraduate Research Experience. In Proceedings of the 35th ASEE/IEEE Frontiers in Education Conference (FIE 2005), Oct. 19 – 22, Indianapolis, IN.
8. **Rahman**, Muhammad A. and Martha Evens. 2003. Support for Question-Answering Systems: Adding Proper Name Derivatives to a Lexical Database. Proceedings of the Second IASTED International Conference on Information and Knowledge Sharing (IKS-2003), November 17-19, Scottsdale, AZ, pp. 229-234.
9. **Rahman**, Muhammad A. and Martha Evens. 2002. Identifying and Retrieving Derivatives of Proper Names from the Collins English Dictionary for a Lexical Database. Proceedings of the Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-2002), April 13-14, Chicago, IL, pp. 76-80.
10. **Rahman**, Muhammad A. and Martha Evens. 2000. Retrieving Knowledge for a Lexical Database from Proper Noun Entries in Collins English Dictionary. Proceedings of the Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-2000), April 15-16, Fayetteville, AR, pp. 63-67.
11. **Rahman**, Muhammad A. and Martha Evens. 2000. Categorization of Proper Names for Inclusion in a Lexical Database. Proceedings of the International Conference on Computers and their Applications (CATA-2000), March 29-31, New Orleans, LA, pp. 102-107.

OTHER CONFERENCE PRESENTATIONS:

1. **Rahman**, Muhammad Asadur. 2009. Effective Learning Activities in a Networking Course of an IT Curriculum. 16th Georgia Conference On College & University Teaching Friday & Saturday, February 13-14, Kennesaw, GA.
2. Julie K. Bartley, Sharmistha Basu-Dutt, Rebecca Dodge, Victoria J. Geisler, Javier E. Hasbun, Michele Joyner, G. Richard Larkin, Deborah Lea-Fox, Dusty Otwell, Muhammad **Rahman**, Karen H. Smith, John H. Storer, and S. Swamy-Mruthinti. 2005. Generating Enthusiasm for Math and Science at University of West Georgia. Gordon Research Conference: Chemistry Education Research & Practice, New London, CT, June 2005.
3. Victoria Geisler. Karen Smith, Muhammad **Rahman** and Deborah Lea-Fox. 2006. CSI:UWG. Georgia Science Teacher Association Conference: Nurturing the Love of Science, Columbus, GA, February 17, 2006.
4. Victoria J. Geisler, Julie K. Bartley, Sharmistha Basu-Dutt, Javier E. Hasbun, Michele Joyner, G. Richard Larkin, Deborah Lea-Fox, Dusty Otwell, Muhammad **Rahman**, Karen H. Smith, and S. Swamy-Mruthinti. 2006. Forensics is Generating Enthusiasm for Math and Science. National Meeting of the American Chemical Society, Atlanta, GA, March 2006.
5. Victoria J. Geisler, Julie K. Bartley, Sharmistha Basu-Dutt, Javier E. Hasbun, Deborah Lea-Fox, Muhammad **Rahman**, Karen H. Smith, and S. Swamy-Mruthinti. 2006. Generating Enthusiasm in Math and Sciences. STEP Grantee Meeting, April 20-21, 2006. Washington D.C.

CONTRACTS AND GRANTS (EXTERNAL)

“Generating Enthusiasm for Math and Science (GEMS)”, **National Science Foundation (NSF) STEP grant**, Division of Undergraduate Education (Award Number: 0336571), **\$877,093**, January 2004 through December 2008: as Co-PI with Dr. Victoria Geisler as the principal investigator.

CONTRACTS AND GRANTS (INTERNAL)

- UWG Faculty Research Enhancement Award (FREA): 2003-04, 2004-05, 2005-06. Total: \$3,690.
- UWG Faculty Research Grant (FRG): 2003-2004, 2005-2006. Total: \$2,540.
- UWG Student Research Assistant Program (SRAP) Award: 2005-2006, 2006-2007. Total: \$4,050.

AWARDS AND SPECIAL RECOGNITIONS

- 2003 University of West Georgia (UWG) CTL Online Course Development Award for Computer Science core course development (January 2003).
- 2004 Outstanding Undergraduate Teacher of the Year 2003-2004 - voted by students.

- 2006 Recognition Award for being the faculty advisor and mentor for the top place winner student in Sciences undergraduate research competition (Big Night 2006) – award given at the University General Faculty Meeting.

MASTERS THESIS COMMITTEE

Master's Thesis Committee of Charles Otwell. Title: *An Analysis of Programming Techniques for Bulk Data Encryption*. Department of Computer Science, University of West Georgia, Carrollton, GA (Spring 2005).

EXTERNAL THESIS EXAMINER

Ph.D. Thesis of Ms. Humera Noor. Title: *Intelligent View Extrapolation for Dynamic Scenes*. NED University of Engineering & Technology, Karachi, Pakistan (September 2007)

Master's Thesis:of Jason Hailin Lian. Title: *An Improved Media Access Control (MAC) Protocol for Wireless LANs*. Auckland University of Technology, Auckland, New Zealand (September, 2004)

NOTEWORTHY ACCOMPLISHMENTS BY SUPERVISED RESEARCH STUDENTS

- Anna Hix : First Place winner in the Undergraduate Research Competition for Sciences on Campus (Research Day, 2006) and presented research at the Big Night 2006. Student received cash prize as recognition.
- Sunitha Shenoï : Second place winner in the student research competition at the 18th annual Consortium for Computing Sciences in Colleges – Southeast Region (CCSC-SE), Wofford College, SC (November 5-6, 2004): Abstract was published as an addendum to the conference proceedings. Student received cash prize as recognition.

SERVICE ACTIVITIES

UNIVERSITY, COLLEGE, AND DEPARTMENT COMMITTEE ASSIGNMENTS

Committee/Activity	Participation (chair, member, consultant)	Period of Service
SACS Interim Report Committee, Clayton State University	Member	Fall 2009 – Present
Institutional Review Board (IRB), Clayton State University	Member	Spring 2009 – Present
Undergraduate Policy Council (UPC) Clayton State University	Co-chair (8/2010-present) Member (8/2009-8/2010)	Fall 2008 – Present

Civic Engagement Council, Clayton State University	Member	Fall 2009 – Present
Constitution Days Committee, Clayton State University	Member	Fall 2008 – Spring 2009
CIMS Governance Committee, CIMS, Clayton State University	Chair	Fall 2007 – Spring 2008
CIMS Curriculum Committee, CIMS, Clayton State University	Member	Fall 2007 – Spring 2008
CIMS Smith Faculty Award, CIMS, Clayton State University	Chair	Fall 2007 – Spring 2008
IT Curriculum Committee, IT Department, Clayton State University	Chair	Fall 2008 - Present
Assessment Committee, IT Department, Clayton State University	Member	Fall 2008 – Spring 2009
Search and Selection Committee, IT Department, Clayton State University	Member	Fall 2007 – Spring 2008
Governance Committee, IT Department, Clayton State University	Member	Fall 2007 – Spring 2007
Recruitment & Retention Committee, IT Dept, Clayton State University	Member	Fall 2007 – Spring 2007
Search and Selection Committee CS Department, UWG	Member	Fall 2004 – Spring 2005
Executive Committee, NSF STEP grant, University of West Georgia	Member	Spring 2004 – Fall 2008
Service Course Committee, CS Department, UWG	Member	Fall 2005 – Spring 2006
Graduate Curriculum Committee, CS Department, UWG	Member	Fall 2003 – Spring 2005
Undergraduate Curriculum Committee, CS Department, UWG	Member	Fall 2003 – Spring 2004, Fall 2006 – Spring 2007
Faculty Advisory Committee, College of Arts and Science, UWG	Member	Fall 2005 – Spring 2007
General Scholarship Committee, College of Arts and Sciences, UWG	Member	Spring 2007 – Spring 2007

Mentored a group of Advanced Academy students (high school students taking college level courses at UWG) for the FIRST Robotics Regional Competition (Team 2117). A NASA grant of \$10,000 enabled the team to build and program the robot and participate in the competition. Fall 2006 – Spring 2007.