

# Shah Murtaza Rashid Al Masud

**Address:** College of Computer Science  
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## PERSONAL STATEMENT:

I am an Information Technology whole-hearted University Teacher, Researcher, and Developer with more than a decade of exposure to operational environments of Academia and Industry. My M.Sc. from Kharkov State Technical University of Radio Electronics, Kharkov, Ukraine influences my exposure further with my notion and practice of independent and investigative works from analytical problems to solving problems. My research and innovation interests includes wireless body area networks(WBAN), wireless sensor networks(WSN), fuzzy logic(FL), neural networks(NN), space processor (SP), least energy critical infrastructure management(LECIM), Cloud computing, reversible computation and thermodynamics. Creating and involving with independent laboratories for hands-on and applied research, experiment, service development and deployment having a social and global impact are my passion.

I am spontaneously flexible to adapt with new ideas, tools, and cutting edge technologies towards continuous improvement personally and collectively. I have well-flourished analytical, communication, and leadership skills built on a solid foundation of technical and research based knowledge, years of experience, and etiquette. I am a member of several professional organizations.

## EDUCATION AND QUALIFICATION :

MSc in Computer Engineering (with Honours), Kharkiv State Technical University of Radio electronics, Kharkiv, Ukraine (2001)

BSc in Computer Engineering (with Honours), Kharkiv State Technical University of Radio electronics, Kharkiv, Ukraine (2000)

## WORK EXPERIENCES :

10/2008 Lecturer | Najran University, Najran, Saudi Arabia

3/2007 Assistant Professor | The University of Asia Pacific, Dhaka Bangladesh

12/2003 Senior Lecturer | Northern University, Dhaka, Bangladesh

11/2001 Lecturer | Dhaka International University, Dhaka, Bangladesh

## TAUGHT COURSES:

Computer Fundamentals, Digital Systems, Discrete Mathematics, Data Structure, Computer Organization & Architecture, Operating System & System Programming, Database Concept, Microprocessor and Assembly Language, Computer Networks, Computer Peripherals and Interfacing, Data Communication, Programming Language Concept, Software Engineering, Information Systems and Systems Analysis, Artificial intelligence, Parallel & Distributed Systems, Neural Networks,

Information systems analysis, and Design, Object Oriented Programming, Information Systems Project Management, Internet Technology, Social, Ethical and Professional Issues.

### PROFESSIONAL SKILLS:

- Software: Windows and Linux operating systems; C/C#/C++, ROOT, LabVIEW; SPSS statistical analysis; Python; MATLAB; typesetting using LATEX; general use of office suites. Some experience of Maple and Mathematica. Limited use of VBA, Pearl and Pascal; Java; PROLOG; LISP; Assembly Language; PHP; MySQL, Oracle, SQL Server;
- Management and Administration
- Data Collection and Analysis
- Teaching, Tutoring and Presenting
- Attended Training Workshop on “Modern Telecommunication Engineering” in DCE, BUET, Dhaka.
- Attended Training Workshop on “Multimedia on Mobile System” in DCE, BUET, Dhaka
- Attended a two-day long workshop on Intra-University IT professionals in Bangladesh organized by The University Grants Commission and The Bangladesh National Commission for UNESCO
- Attended several workshops on teaching methodologies organized by Northern University, Bangladesh
- Participated in workshops on NCAAA accreditation in Najran University, Saudi Arabia
- Participated in workshops on ABET Accreditation in Najran University, Saudi Arabia
- Participated in workshop on E-learning systems, Blackboard, and Echo system, Najran University, Saudi Arabia
- Supervised a M.Sc. student’s thesis paper of NIBAIS as a part time faculty in 2003. Title: ”Philosophical, Biological and Ethical critiques in Artificial Intelligence ”
- Supervised a B.Sc. student’s project at Najran University, College of computer science and information systems in 2011-2012. Title: “Analysis and design an expert system for identifying major water quality types”.
- Supervised a B.Sc. student’s project at Najran University, College of computer science and information systems in 2014-2015. Title: “Database System to control final examination period”.
- Supervised a B.Sc. student’s project at Najran University, College of computer science and information systems in 2015-2016. Title: “Patient recording system: University Hospital”.
- Supervised a B.Sc. student’s project at Najran University, College of computer science and information systems in 2015-2016. Title: “Robot based surveillance systems (RBSS)”.
- The 2nd International Conference of Reliable Information and Communication Technology 2017 (IRICT 2017), <http://www.ysrgst.org/irict2/>
- International Journal of Electrical and Computer Engineering (IJECE, ISSN: 2088-8708, a SCOPUS indexed Journal)

## PUBLICATIONS:

- 1) Shah Murtaza Rashid Al Masud, “An Extended and Granular Classification of Cloud’s Taxonomy and Services”, International Journal of Soft Computing & Engineering Year: 2012 Vol: 2 Issue: 2 Pages/record No.: 278-286, Impact factor: 1.0
- 2) Shah Murtaza Rashid Al Masud, “A Novel Approach to Introduce Cloud Services in Healthcare Sectors for the Medically Underserved Populations in South Asia”, International Journal of Engineering Research and Applications, Vol. 2, Issue 3, May-Jun 2012, pp.1337-1346
- 3) M. Arif Siddiqui, Shah Murtaza Rashid Al-Masud, “Towards Design of Novel Low Power MAC Protocol for Wireless Body Area Networks”. International Journal of Computer Information System, Vol.4 Issue 4, 2012, pp. 12-17
- 4) Tasquia Mizan, Shah Murtaza Rashid Al Masud, Rohaya Latip,” Modified Bees Life Algorithm for Job Scheduling in Hybrid Cloud”, International Journal of Engineering and Technology Volume 2 No. 6, June, 2012, pp. 974-979
- 5) Shah Murtaza Rashid Al Masud, “E-learning as a Service: Towards a Novel Approach for Educational Cloud”, paper accepted for the third international conference on ‘E-learning and Distance learning’, for Feb 4-7, 2013, Riyadh, KSA.
- 6) Shah Murtaza Rashid Al Masud, ‘Analysis and Design an Expert System for Identifying the Types of Water Quality in the Context of Physical Indicators’, Asian Journal of Computer and Information Systems, Volume 01– Issue 01, June 2013, pp.1-10
- 7) Shah Murtaza Rashid Al Masud, ‘Study and Analysis of Scientific Scopes, Issues and Challenges towards Developing a Righteous Wireless Body Area Network’, International Journal of Soft Computing and Engineering (IJSCE), ISSN: 2231-2307, Volume-3, Issue-2, May 2013, pp. 243-251, Impact factor: 1.0
- 8) Shah Murtaza Rashid Al Masud, ‘QoS Taxonomy towards Wireless Body Area Network Solutions’, International Journal of Application or Innovation in Engineering & Management, Volume 2, Issue 4, April 2013, pp. 221-234, Impact factor: 2.379
- 9) Shah Murtaza Rashid Al Masud , ‘Towards Augmentation of Present Technologies and Environment of Grid Computation: A Methodical Study, and Analysis’, International Journal of Application or Innovation in Engineering & Management, Volume 2, Issue 5, May 2013, pp. 285-300, Impact factor: 2.379
- 10) Shah Murtaza Rashid Al Masud, ‘A Knowledge Based System towards Identifying Problems and Getting Instant Solutions about Our Personal Vehicles’, International Journal of Advanced Trends in Computer Science and Engineering, Volume 2, No.2, March - April 2013, pp. 15-20
- 11) Shah Murtaza Rashid Al Masud, ‘Developing an Expert System for Water Types Identification in the Context of Physicochemical Indicators in Aridity-based Regions’, International Journal of Computer Applications (0975 – 8887), Volume 70– No.11, May 2013, pp. 43-50, Impact factor: 0.821
- 12) Shah Murtaza Rashid Al Masud, ‘A Unified Cloud Computing Model towards Developing ‘E-learning as a Service’ based Education System’, International Journal of Computer Applications (0975 – 8887), Volume 72– No.07, May/June 2013, pp. 38-51, Impact factor: 0.821
- 13) Shah Murtaza Rashid Al Masud, ‘Study and Analysis of Scientific Scopes and Issues towards Developing an Efficient LECIM’, International Journal of Computer Applications (0975 – 8887), Volume 74– No.06, July 2013, pp. 46-56, Impact factor: 0.821

- 14) Ahmad Taleb, Shah Murtaza Rashid Al Masud, Anwar Esmail, ‘ Towards developing a Generic Academic Quality Assurance Framework (GAQAF) for NCAAA and ABET accreditations’; International Journal, 2016
- 15) Shah Murtaza Rashid Al Masud, Mohammad Arif Siddiqui, Mohammad Basit Kamal, ‘Towards Improving the Quality of Present MAC Protocols for LECIM Systems’ International Journal of Advanced Computer Science and Applications(IJACSA), 7(6), 2016, Thomson Reuters (ISI), Impact Factor 1.32
- 16) Shah Murtaza Rashid Al Masud, Asmidar Abu Bakar, Salman Yussof, ‘Determining the Types of Diseases and Emergency Issues in Pilgrims During Hajj: A Literature Review’ International Journal of Advanced Computer Science and Applications(IJACSA), 7(10), 2016, ESCI, Thomson Reuters (ISI)
- 17) Shah Murtaza Rashid Al Masud, Asmidar Abu Bakar, Salman Yussof, ‘A Systematic Review of Technological Issues In Monitoring Pilgrims’ Health During Hajj: Current State, Challenges And Future Directions’, JATIT, 96(7), 2018, Scopus Indexed
- 18) Shah Murtaza Rashid Al Masud, Asmidar Abu Bakar, Salman Yussof, Ghassan Ahmad Ali, Vaskor Mostafa, ‘A Conceptual Framework of WMN enabled WBAN System for Pilgrims’ Health Monitoring during Hajj in the Kingdom Saudi Arabia’, ARPN Journal of Engineering and Applied Sciences, 13(7), 2018, Scopus Indexed
- 19) Ghassan Ahmad Ali, Shah Murtaza Rashid Al Masud, ‘Routing Optimization in WBAN Using Bees Algorithm for Overcrowded Hajj Environment’, International Journal of Advanced Computer Science and Applications(IJACSA), V9 (5), 2018, ISI ESCI Indexed
- 20) Shah Murtaza Rashid Al Masud, Asmidar Abu Bakar, Salman Yussof, ‘Towards developing a MAC protocol for outer-WBAN communication for pilgrims’ health monitoring during Hajj: A feasibility study’, IJET, V7(3), 2018, Scopus Indexed
- 21) Shah Murtaza Rashid Al Masud, Asmidar Abu Bakar, Salman Yussof, ‘A modified WBANs MAC superframe using priority-criticality index table for managing pilgrims’ emergency traffic in Hajj’, Indonesian Journal of Electrical Engineering and Computer Science, to be published in 2019, Scopus Indexed
- 22) Shah Murtaza Rashid Al Masud, Asmidar Abu Bakar, Salman Yussof, ‘A priority-queue dominated and delay-energy guaranteed mac superframe structure for wbans to deal with various emergency traffic of pilgrims during hajj: an analytical model’, Journal of Theoretical and Applied Information Technology, to be published in 2019, Scopus Indexed
- 23) Shah Murtaza Rashid Al Masud, Ghassan Ahmad Ali, ‘WMN enabled WBAN System for Pilgrims’ Health Monitoring at Overcrowded Environment during Hajj in Saudi Arabia: a Feasibility Study’, International Journal of Engineering and Technology (IJET), to be published in 2019, Scopus Indexed

## CONFERENCES:

- 1) Shah Murtaza Rashid Al Masud, ‘Does the Digital Divide Still Exist’ published a research paper in ICCIT-2004 Conference at BRAC University.
- 2) Shah Murtaza Rashid Al Masud, “Quantum Computation: A new approach in Reversible Logic”, published a research paper in ICCIT-2005 Conference at IUT Gazipur.
- 3) Shah Murtaza Rashid Al Masud, Ahmad Taleb, Mohammed Al Shargabi, ‘Developing a Quality Assurance System using NCAAA and ABET Accreditation Standards: College of Computer Science and Information Systems, Najran University-Case Study’, accepted paper

for the 1<sup>st</sup> national computing colleges conference-NCCC-2016, King Abdul Aziz University, Jeddah, KSA, February 17-18, 2016

- 4) Shah Murtaza Rashid Al Masud, 'Towards Designing of a Hajj Healthcare System Employing Wireless Body Area Network and Wireless Mesh Network'; submitted paper for '2016 International Conference on Computer Systems and Informatics (ICCSI 2016)', Taif University, Taif, KSA, May 3-5, 2016
- 5) Ahmad Taleb, Mohammed Al Shargabi, Shah Murtaza Rashid Al Masud, 'Establishment of Committees/Units and Distribution of Tasks to Secure National (NCAAA) and International (ABET) Accreditation Requirements', accepted paper for the 2<sup>nd</sup> national computing colleges conference-NCCC-2017, University of Hail, Hail, KSA, February 22-23, 2017
- 6) Mohammed Al Shargabi, Muhammad Akram, Ahmad Taleb, Mr. Shah Murtaza Rashid Al Masud, 'Systematic Model for Prioritizing NCAAA Practices', accepted paper for the 2<sup>nd</sup> national computing colleges conference-NCCC-2017, University of Hail, Hail, KSA, February 22-23, 2017
- 7) Mohammed Al-Shargabi, Muhammad Akram, Ahmad Taleb and Shah Murtaza Rashid Al Masud, 'Systematic Model for Prioritizing NCAAE Practices', NC3-The 3rd National Computing Colleges Conference, King Khalid University, Abha, Saudi Arabia, 26-27 February, 2018

#### **HONORS/AWARDS:**

- Board Scholarship in Undergraduate Level (Secondary and Higher Secondary School Level).
- Talent Pool Scholarships in Primary and Junior School Level.
- BSc in Computer Engineering, Excellent with Honours
- MSc in Computer Engineering, Excellent with Honours
- Achieved "Shield of ethics and initiatives" in 2011 from college Dean, NU, KSA
- Achieved one of the best three faculty website award, 2010-2011, from NU Vice Chancellor, KSA
- Achieved best students' organizer for scientific research and project, 2012, from Dean of Scientific research division, NU, KSA.
- Achieved best students' organizer for scientific research and project, 2013, from Dean of Scientific research division, NU, KSA.

#### **PROFESSIONAL MEMBERSHIPS:**

- IEEE Member, Number: 91296995
- Associate Member, Bangladesh Computer Society, N: AM-3452.
- Member: International association of computer science and information technology-IACSIT: No. 80340529
- Member of International Internet Society: ISOC: No. 75660 Global
- Member of International Association of Engineers, IAENG, No. 121482

#### **OTHER ACTIVITIES:**

- Active member of the College's Quality Assurance Unit" for ABET (Accreditation Board of Engineering and Technology ), USA based, since 2010.

- Active member of the College's Quality Assurance Unit" for NCAAA (National commission of academic accreditation and assessment), KSA based, since 2010.
- Active member of Department's courses and programs specification, reports and improvement plan committee at Najran University, since 2010.
- Active member for designing and developing college's and programs' handbook, Catalog, Lab guide committee for the faculty of CS&IS, NU, since 2010.
- Member of students scientific committee, faculty of CS&IS, Najran University since 2011.
- Head of DQU FRC IS committee, including DQU website committee, since 2012.
- Member of DQU IS department curriculum committee, since 2012.
- Member of college website committee, since 2012.
- Academic advisor, for students of CS and IS departments, NU, KSA, since 2008.
- Lab Supervisor (Assembly language lab) at CS&IS, NU, since 2009.
- Head of the CSE dept at DIU, Bangladesh, period: 2001-2003.

Major activities:

- To deliver lectures on the Courses of CS, IS and CSE programs
- To prepare the class routine
- To make the exam routine
- To moderate question papers
- To review the semester final results
- To organize cultural programs, picnic, sports, study tour, etc
- To supervise students' project in different semesters
- To supervise thesis/ projects of graduate students