



**MD SAZZAD HOSSAIN**

**Member**  
**University Grants Commission**  
**of Bangladesh (UGC)**  
**&**  
**Director**  
**Bangladesh Satellite Company**  
**Ltd.(BSCL)**

**Former Professor**

Department of Computer Science and Engineering  
University of Liberal Arts Bangladesh

**Objective**

An innovative and driven leader, focused on achieving exceptional results in highly competitive environment that demands continuous improvement. Person of high integrity known for ability to envision and implement with expertise.

**Career Highlights**

- + Head, Department of Computer Science and Engineering, University of Liberal Arts Bangladesh (December 2009 – May 2017)
- + Head, Department of Computer Science and Engineering, International Islamic University Chittagong, Bangladesh (March 2003 – May 2003).
- + Supervised more than fifty undergraduate students in their final year/semester thesis/project.
- + Twenty six (26) years of experience in Information Technology.

**RESEARCH INTEREST**

Quantum computing, quantum algorithms, quantum entanglement, de-coherence, natural computing, fault-tolerant computing, biological computing, engineering mathematics, liberal mathematics, theoretical computer science, Nano Technology, Low Power VLSI Design, Reversible logic, Software Engineering, Social Computing, Big Data Analytics, IoT, Human Computer Interaction, Artificial Intelligent, Machine Learning, Robotics, Human Robot interaction.

**EDUCATION**

- Ph.D. in Electrical and Computer Engineering, Portland State University, Oregon, USA  
Dissertation: Classical and Quantum Search Algorithms for Quantum Circuits and Optimization of Quantum Oracles  
Advisor: Professor Dr. Marek A Perkowski
- M.Sc. (Engg) in Electrical and Computer Engineering, Portland State University, Oregon, USA.  
Advisor: Professor Dr. Marek A Perkowski
- B.Sc. (Engg.). in Electrical System Network Engineering  
Moscow Technical University, Moscow, Russia

**HONOURS**

- Achieved the BOARD AWARD for securing the Star Marks in the combined merit list in SSC 1984 and HSC 1986.
- Talent Pool Merit Scholarship at all levels in school and college.

**AWARDS**

- International Islamic University Chittagong PhD Fellowship (2005 – 2008)
- Moscow Technical University Undergraduate Scholarship (1991 – 1994)

**GRANTS**

**Principal Investigator**

**Project Name: A Holistic Mitigation Approach to Arsenic Contamination Via Sensing, Communication and Collaboration**

- **Date:** September 2013 - December 2014
- **Key Features:**
  - Usage of tube-wells instead of surface water have been increased for the last five decades
  - Lack of awareness and literacy regarding impacts of arsenic among the rural people
  - Replacement of tube-wells as drinking water source is yet to be sort out
  - Current detection system are not able to provide real-time information for monitoring arsenic of all tube-wells within a specific area simultaneously

## Co-Investigator

### **Project Name: Poor Utilization of Road Networks & Variable Vehicular Speeds: An Empirical and Modeling Study of the Factors to Traffic Congestion**

- **Date:** November 2013 - December 2014
- **Key Features:**
  - Usage of tube-wells instead of surface water have been increased for the last five decades
  - Lack of awareness and literacy regarding impacts of arsenic among the rural people

### **Project Name: Faculty Research Opportunities Program**

- **Date:** 2009
- **Key Features:**
  - This work aimed to further develop a system that integrates human motion tracking hardware with a human model in a CAD environment, to demonstrate the interaction of the human-guided human model with a CAD object model, and to provide recommendations for the enhancement of the system.

### **Title : CAD Tools for Quantum Computer**

- **Funding Body:** Portland State University/International Islamic University Chittagong
- **Key Features :**
  - Systematically design logic synthesis tools for Quantum Computers. Investigate the Automated tools for Quantum Layout.

### **Title : Model for Human-Robot Interaction**

- **Key Features :**
  - This work aims to investigate the factors of human-robot interaction necessary for social interaction between robots and people. At particular focus are technologies enabling the development of robotic personal assistants.

### **Title: Development of the Human Agent for Human-Robot Interaction**

- **Funding Body:** Intelligent Robotics Laboratory, Portland State University
- **Date:** 2005 - 2009
- **Key Features :**
  - Research focus is the development of robotic perception capabilities to detect and interact with humans. Employing detection technologies including face detection/recognition, speech recognition, and infrared motion detection. Coordinating interaction via actions, synthesized speech, and task behaviors to create robotic responses and interaction with humans.

### **Title : (Engineering Capstone Design Projects Of Real World Problems) for Bangladesh**

- **Date:** Summer 2009

- **Key Features:**

- This project evaluated the viability of using a more automated means of performing the water heating for Crocodile Farm in Valuka, Dhaka, Bangladesh and support Solar facilities Complex. The current availability of commercial units and the need for future adaptation/development will be investigated. This initial assessment will assist Solar Projects in commercial basis and in determining the path of supporting additional assessment and / or developmental activities.

**Title : Using Human Motion Tracking for Human Factors testing in Design**

- **Date :** Fall 2008

- **Key Features :**

- Currently working with undergraduate students to continue work on interfacing human modeling, especially via motion tracking, into the design process for development, testing and verification.

## **EMPLOYMENT HISTORY**

### **ADMINISTRATIVE DUTIES**

Head, Department of Computer Science and Engineering, University of Liberal Arts Bangladesh (December 2009 – May 2017)

Adviser, IT Division, University of Liberal Arts Bangladesh ( February 2010 – Present)

Head, Department of Computer Science and Engineering, International Islamic University Chittagong, Bangladesh (March 2003 – May 2003).

Convener, International Islamic University Chittagong, Library Automation Committee.

Convener, Job Fair 2003, Chittagong, Bangladesh

### **ACADEMIC POSITIONS**

**Professor**

Department, of Computer Science and Engineering  
University of Liberal Arts, Bangladesh (ULAB)  
May 2017 to present

**Professor and Head,**

Department, of Computer Science and Engineering  
University of Liberal Arts, Bangladesh (ULAB)  
December 2009 to May 2017

**Professor and Head**

Department, of Computer Science and Engineering  
International Islamic University Chittagong, Bangladesh  
March 2003 – May 2003

**Professor**

Department, of Computer Science and Engineering  
International Islamic University Chittagong, Bangladesh  
September 2001- February 2003

## **VISITING/ADJUNCT POSITIONS**

### **Adjunct Associate Professor**

School of Communication & Engineering,  
Independent University of Bangladesh.  
July 2009 - December 2009

### **Adjunct Assistant Professor**

School of Communication & Engineering,  
Independent University of Bangladesh.  
November 2001- August 2002

## **INDUSTRIAL**

### **Advisor-IT**

University of Liberal Arts Bangladesh (ULAB)  
Key Responsibilities:

- Over viewing IT resources:
- Over viewing IT infrastructure:
- Coordinator for developing the software of ULAB Resource Management System (URMS) [ERP solution].
- Planning for Network Infrastructure Management
- Software Development And Business Automation (Ulab Resource Management System-Urms)
- ULAB Lab Management For Students

### **Assistant System Administrator**

Computer Support Team for ECE & CS Department,  
Portland State University, Oregon, USA  
January 2001- March 2001  
Key responsibilities:

- UNIX and Windows NT network administration
- Network setup and topology
- UNIX and PC based servers and workstations.

### **Software Developer**

Ishika dot com, Ohio, USA  
April 2001 – July 2001

### **Application Programmer/Developer**

JSC Gomti International Ltd., Moscow, Russia.  
August 1994 to September 1999  
Key responsibilities:

- Design, development and maintenance of project tracking database system for keeping track of employee payroll records, multiple projects, bonus calculations, client information, weekly produced billing invoices and quarterly generated performance reports.
- Support, service and maintenance of data management system for providing top-down view of company database, keeping track of important business data for manufacturing, inventory, marketing and strategic planning in Windows 95/98/NT, FoxPro 2.5 environment.

## CONSULTING POSITIONS

- + **ICT Business and System Analysis**  
Spectrum Engineering Consortium Limited  
Corporate Office  
69/1, Panthapath, ChandrashilaSuvastu Tower, 7th Floor, Suite0C, Dhaka-1205
- Software Development Center**  
ICT Incubator, BSRS Bhaban, 7th & 8th Floor  
12 KaziNazrul Islam Avenue, Karwan Bazar, Dhaka-1215

## OTHER TEACHING ACTIVITIES

### IT Skill Trainer

Volunteered for Under Privileged School Kids, Location  
January 2011-

### Lego Robotics Trainer

Volunteered for High School Kids, Location  
June 2011-

### Teaching Assistant

Portland State University  
2005-Winter 2008

### Lab Instructor

Preparatory Academics for Oregon Engineers  
Summers 2005 – 2007

### Team Leader

Advanced Engineering & Research Center,  
International Islamic University Chittagong.

### Supervisor

Networks & Computer Labs,  
International Islamic University Chittagong, Bangladesh  
November, 2001- December, 2004

### Teaching Assistant

Portland State University  
Fall 2001-Winter 2001

### Tutor

Portland State University  
Fall 2000 – Winter 2001

## EDITORIAL

### Editor

ULAB Journal of Science and Engineering  
ISSN 2079-4398

## ADVISORY ROLES

### Member, Advisory Committee,

1<sup>ST</sup> International Conference on Advanced Information and Communication  
Technology (ICAICT 2016).

## REVIEWER

Institution of Engineering and Technology Journals  
International Journal of Electronics  
International Journal of Computers & Mathematics with Applications  
ISSN: 0898-1221  
International Journal of Mathematical and Computer Modeling  
ISSN: 0895-7177  
Scientific Journals International (SJI)  
ISSN: 1556-6757  
Journal of Scientific Research  
ISSN: 2070-0245

## EXTERNAL SERVICES

### Workshop

**Student Program Chair** - International Workshop on Robot and Human Interactive Communication (2005) Organizing Committee, Portland State University, Oregon, USA.

### Leadership

Chairman and Founder, Alternative and Sustainable Energy Foundation Bangladesh, *2011-present*  
Secretary General, Central Governing Body, Old Faujian Association (Ex-Cadets of Faujdarhat Cadet), *2011-2012*  
Science and Technology Secretary, CUET Ex-Student Association, *2011-2012*.

## PUBLICATIONS

### JOURNALS

- N. Mansoor, S. M. N. Uddin, **S. Hossain**, "A Robust Architecture for CR-VANET in Multi-agent Based Intelligent Traffic Management System" *JurnalTeknologi*, 2016 (Accepted for Publication). (SCOPUS Indexed)
- N. Giesecke, **S. Hossain**, D. H. Kim, M. Perkowski, "Search for Universal Ternary Quantum Gate Sets with Exact Minimum Costs," *Embedded Software Design (Journal of System Architecture)*, The EUROMICRO Journal, 2009.
- S. Hossain**, M. Islam, R. Bashar and Alamgir "Logical Reversibility Based on Reversible Computing Technology" *Asian Journal of Information Technology*, Volume 3 Number 4, 2004, pp. 241-244, ISSN: 1638-8831
- M.N. Seddiqui, **S. Hossain**, S. and M.R. Bashar, "Bangla Spell Checker Considering Relative Disposition of Characters And Phonetic Similarity" *Asian Journal of Information Technology*, Volume 3 Number 4, 2004, pp. 241-244, ISSN: 1638-8831

### CONFERENCE PUBLICATIONS

T.W. Ahmed, M.N. Jamil, **M.S. Hossain**, K. Andersson and M.S. Hossain (2020), An Integrated Real-Time Deep Learning and Belief Rule Base Intelligent System to Assess

- Facial Expression Under Uncertainty, In: Proceedings of 9th International Conference on Informatics, Electronics & Vision (ICIEV), 2020, IEEE August,2020, Japan
- D. Gupta, E. Hossain, **M.S. Hossain, M.S. Hossain** and K. Andersson (2020), An Interactive computer System with Gesture-Based Mouse and Keyboard, In: Proceedings of 9th International Conference on Informatics, Electronics & Vision (ICIEV), 2020, August,2020, Japan
- N. Mansoor, N. J.Farin, **S. Hossain**, “FITSYS: A Conceptual Framework For Intelligent Transportation System Driven Smart City In Bangladesh”, 57th Annual Convention, The Institute of Engineers Bangladesh (IEB), February 2017. Bangladesh
- S. M. N. Uddin, N. Mansoor, M. Rahman, N. Mohammed, and **S. Hossain**, "A Framework for Event Anomaly Detection in Cognitive Radio Based Smart Community", International Workshop on Computational Intelligence, 2016 (IWCI 2016), December, 2016, Bangladesh. (Scopus Indexed)
- S. M. N. Uddin, N. Mansoor, **S. Hossain**,” Cognitive Radio Enabled VANET for Multi-agent Based Intelligent Traffic Management System“, 1 ST International Conference on Advanced Information and Communication Technology 2016 (ICAICT 2016), May 16-17, 2016, Chittagong, Bangladesh.
- N. J.Farin, A. Rahman, N. Mansoor, **S. Hossain**, ”WoTCoMS: A Novel Cross-Layered Web-of-Things Based Framework for Course ManagementSystem“, 1 ST International Conference on Advanced Information and Communication Technology 2016 (ICAICT 2016), May 16-17, 2016, Chittagong, Bangladesh.
- N.Adnan, R. Islam, **S. Hossain**, “Clustering Software Systems to IdentifySubsystem Structures using Knowledgebase”, 5th Malaysian Engineering Software Conference (MYSEC2011), 2011, UniversitiTeknologi Malaysia (UTM), Kuala Lumpur, Malaysia.
- M. Alam, **S.Hossain**, “Prediction Model for World Electricity Generation Concerning CO<sub>2</sub> Emission”, 6th International Conference on Electrical and Computer Engineering (ICECE 2010), December, 2010, Dhaka, Bangladesh.
- N. Giesecke, **S.Hossain**, S. Kim, M. D. H. Perkowski, “ Search for Universal Ternary Quantum Gate Sets with Exact Minimum Costs,” Proceedings of the Reed-Muller Conference, 2007, Oslo, Norway.
- M. Lukac, N. Giesecke, **S.Hossain**, S. Kim, D.H., Perkowski, “ Quantum Behaviors: Synthesis and Measurement”, Proceedings of the Reed-Muller Conference, 2007, Oslo Norway.
- Q. Williams, M. Kelley, C. Castillo, C. M. Lukac, **S.Hossain**, D.H. Kim, J.Allen, S.M.Sunardi, D.H.Perkowski, “An Emotional Mimicking Humanoid Biped Robot and its Quantum Control Based on the Contrsint Satisfaction Model”, The proceedings of the International Conference, ULSI, 2007.
- S. Hossain**, R.U. Islam, M.S. Hossain, “A System to Support Person Identification using Ear Biometrics”, 7th International Conference on Computer and Information Technology, (ICCIT-2004),www.bracuniversity.net/iccit2004/, December 26-28, 2004, Dhaka, Bangladesh
- M.S. Hossain, M.Alamgir, **S.Hossain**, “An Object-Oriented Approach to Support Faster and Manipulation of Spatial Data”, 19th International Conference on Computers and TheirApplication (CATA-2004), March 18-20, 2004, Seattle, Washington, USA.
- M.M. Alam, **S. Hossain**, “Prediction model for world electricity generation concerning CO<sub>2</sub> emission”, In Electrical and Computer Engineering (ICECE), 2010 International Conference on (pp. 342-345), Dhaka, Bangladesh.
- S. Hossain**, M. Perkowski, F. Zhao, “Minimal Graph Coloring using the Quantum Algorithm of Grover and the importance of Quantum Composition/Layout Problem in the complete design of Quantum Oracles”, 9th International Workshop on Boolean Problems, September16-17, 2010, Freiberg(Sachsen), Germany.

- M.S. Hossain, C.G. Davies, **S.Hossain**, “An Information System to Visualise and Analyse Flood” Proceedings of 5 th International Conference on Computer and Information Technology (ICCIT), East West University, December, 2002, Dhaka, pp. 559-564. ISBN: 984-32-0450 6
- M.N. Islam, M.H.Seddiqi, **S.Hossain** and M. M. Hassan, “An Optimal Bangla Keyboard Layout”, Proceedings of 5 th International Conference on Computer and Information Technology (ICCIT), East West University, December, 2002, Dhaka, pp. 227-232. ISBN: 984-32-0450-6
- D. Gupta, E. H. Fahad, M.S. Hossain, K. Andersson & **S. Hossain**. (2019). A Digital Personal Assistant using Bangla Voice Command Recognition and Face Detection, In: Proceedings of IEEE International Conference on Robotics, Automation, Artificial-Intelligence and Internet-of-Things 2019, **November 29 – December 1**, 2019, Dhaka, Bangladesh.
- R. R. Chowdhury, M.S. Hossain, **S.Hossain** & K. Andersson. (2019). Analyzing Sentiment of Movie Reviews in Bangla by Applying Machine Learning Techniques, In: Proceedings of 2<sup>nd</sup> International Conference on Bangla Speech and Language Processing (ICBSLP), IEEE, **27-28 September, 2019**, Shahjalal University of Science and Technology, Sylhet, Bangladesh
- M.R. Chowdhury, M.S. Hossain, R.U. Islam, K. Andersson & **S. Hossain**. (2019). Bangla Handwritten Character Recognition Using Convolutional Neural network with Data Augmentation, In: Proceedings of Joint 8<sup>th</sup> International Conference on Information, Electronics and Vision (ICIEV), IEEE, **May 30- June 2**, 2019, Eastern Washington University, USA
- T.U. Ahmed, **S. Hossain**, M.S. Hossain, R.U. Islam & K. Andersson. (2019). Facial Expression Recognition Using Convolutional Neural Network with Data Augmentation, In: Proceedings of Joint 8<sup>th</sup> International Conference on Information, Electronics and Vision (ICIEV), IEEE, **May 30- June 2**, 2019, Eastern Washington University, USA
- T.U. Ahmed, **S. Hossain**, M.S. Hossain, R.U. Islam & K. Andersson. (2019). A Deep Learning Approach with Data Augmentation to Recognise Facial Expression in Real Time (Submitted as a book chapter for a Springer book)
- M.R. Chowdhury, M.S. Hossain, R.U. Islam, K. Andersson & **S. Hossain**. (2019). Bangla and Hindi Handwriting Character Recognition using Deep Learning and Combined Methodology Approach (Submitted as a book chapter for a Springer book)

## WORKSHOPS PUBLICATIONS

- S. Hossain**, M. Perkowski, F. Zhao, “Minimal Graph Coloring using the Quantum Algorithm of Grover and the importance of Quantum Composition/Layout Problem in the complete design of Quantum Oracles”, 9<sup>th</sup> International Workshop on Boolean Problems, September 16-17, 2010, Freiberg (Sachsen), Germany.
- S. Hossain**, M. Perkowski, “The affine gates and affine polarities for quantum arrays with small costs”, 17<sup>th</sup> International Workshop on Post-Binary ULSI Systems, May 24, 2008, Dallas, Texas, USA.

## MAGAZINE/TECHNICAL REPORTS

- S. Hossain**, “Future Computing”, Advanced Computing, Portland State University, August 2007.
- S. Hossain**, “Reversible Cellular Automata”, *Advanced Computing, Portland State University*, July/August 2006.

- S. Hossain**, “Humanoid Robots” Technical Report, Intelligent Robotics Laboratory, Portland State University, December 2006.
- S. Hossain**, “NP-NP, NPN Classification for Logic synthesis in Quantum Computer”, Final Report for Quantum Research Group, August 2005.

## BOOKS

- S. Hossain**, M.Q. Maula, M. M. Jahangir, “ Programming in C – Basic, Advanced & Graphics Programming”, Popular Books, Dhaka-1205, Bangladesh, August 2003, ISBN: 984-32-0694

## Doctoral Dissertation

**Title :** Classical and Quantum Search Algorithms for Quantum Circuits and Optimization of Quantum Oracles.

**Contributions :**

- Introduced the concept of affine quantum gates and circuits.
- Generalized the concept of polarity to affine polarity.
- Wrote software to synthesize quantum circuits with affine gates. Introduced the concept of two-level search where the upper level performs evolutionary search in the space of polarities and the lower level the tree search within one polarity.
- The methods of this type are very broad to design many classes of quantum circuits.
- Found several applications of this methodology to solve combinatorial CAD problems such as minimization of electromagnetic pulses in NMR, affine circuit synthesis and classical AND/EXOR circuit synthesis.
- Introduced new quantum oracles for several problems such as graph coloring, various forms of satisfiability, quantum circuit synthesis (ESOP), constraint satisfaction problems and puzzles
- Introduced a new concept of hierarchical parallel hybrid search that uses classical master computers and slave computers being pairs of standard computer with Grover accelerator with various parameter setups of Grover accelerators.

## TERM PAPERS

**Study Of PCI- X Bus System:** Competitive study of peripheral unit of different kind such as PCI-X, InfiniBand, Rapid IO, LDT .etc are compared in terms of main stream computing, compatibility, marker catching, performance issue and found that PCI-X is the better solution.

**Branch prediction technique in general and special processors:** This paper describes how a SBI(Selective Branch Inversion ) scheme is use on top of the existing branch prediction techniques (Gshare, Bi-Mode, McFarling) to get a higher prediction accuracy. It also describes techniques for SPMT processors. They are extrapolation, correlation and hybrid of extrapolation and correlation.

**ATPG Tool Study For The Industry:** ATPG increase the product quality with generated test vectors for high defect detection. Different tools such as FastScan and TetraMax tool used in the industry have been studied.

**Energy Consumption in Reversible Logic Circuits:** This project involved the design of digital logic gates/circuits; study the energy consumption by these circuits and compare it's effectiveness with the traditional static CMOS gates/circuits. To achieve the goal of this project, a number of basic gates were designed using Cadence's digital design tools. These gates were used as basic building blocks to design 4-bit and 16 bit Carry-lookahead adder circuits in Reversible as well as static CMOS circuits topologies. The study of energy consumption demonstrated that there was 78 – 79% reduction in the energy consumption in reversible circuits compared to static CMOS circuits.

**Standard Cell Based Digital Circuit Design Methodology:** As an integrated part of a sequence of two Digital IC Design courses, several static CMOS gates, and small circuits (e.g. Full adder, D-Latch, 5-bit adder/subtractor, Serial shift Parallel load registers) were designed using Cadence design tools. Apart from this, layout design of individual standard cells and P&R of circuits were also performed using Cadence back-end tools. Full datasheet was also prepared for each standard cell. The objective was to learn and follow the Standards cell based digital IC Design methodology.

## INVITED SPEAKER

Delivered a talk on “Quantum Computer” in October 27, 2009, at Institute of Engineers, Chittagong, Bangladesh.

Delivered a talk on “Why Quantum Computer” in June, 2007, at Portland State University, Oregon, USA.

## STUDENT SUPERVISION

Current PhD Student: Md. Alamgir, Information Technology, Open University of Malaysia.

More than fifty undergrad students completed their thesis/project for their partial fulfillment of the B.Sc. degree in Computer Science & Engineering.

- Design of Proxy Server on Java
- Modeling Wireless Network with Asynchronous VLSI
- VLSI Design and Logic Synthesis with Technology Mapping
- Design of a 4 bit adder
- Online Office Management System
- Design and implement Web based System

## TAUGHT COURSES

- Introduction to Quantum Computer
- VLSI Design
- Mathematics for Life
- Engineering Mathematics
- Discrete Mathematics
- Finite Automata and Computation Theory
- Computer Communications and Networks
- Data Communication and Computer Networks

- Internet and Intranet
- Telecommunication
- Computer Network Management
- Database Management
- Management Information System
- Web Application and Internet
- Digital Image Processing
- Artificial Intelligence
- Digital Signal Processing
- Programming C

Have taught courses on the undergraduate and graduate levels interacting with engineering and computer science students ranging from honours 2nd-year to graduate students. Designed two new courses for the Quantum Computer and Low Power design concentration within the computer engineering curriculum.

## MEMBERSHIPS

### PROFESSIONAL

Life Fellow, Institution of Engineers Bangladesh  
 Life Fellow, American Alumni Association  
 Life Member, Russian Alumni Association  
 Life Member, CUET Ex-Student Association  
 Life Member, Old Faujian Association(Ex-Cadet of Faujdarhat)  
 Life Member, Ex-student of Chittagong Govt. College

### SOCIAL

Central Council Member, Institution of Engineers Bangladesh (IEB), 2015-2017  
 Executive Member, BangabandhuProkausholeePorishod (BPP),2013-2016  
 Chairman and Founder, Alternative and Sustainable Energy Foundation Bangladesh  
 Elected Joint Secretary General, Central Governing Body, Old Faujian Association, 2011-2012  
 Science and Technology Secretary, CUET Ex-Student Association, 2011-2012  
 Member, Energy Action Coalition, USA  
 Power Shift 09 Conference, February 27<sup>th</sup> to March 2<sup>nd</sup> , Washington D.C. USA  
 Member, Cadet College Club, Dhaka, Bangladesh

## TECHNICAL SKILL

**Database Systems:** FoxPro, Oracle 8.  
**Programming Languages:** C, C++,Java, HTML, LISP, VHDL, Visual HDL, SQL, PL/SQL, FORTRAN 77.  
**Operating Systems:**UNIX, Linux, MS DOS, Windows 95/98/2000, Windows NT 4.0.  
**Business Software:** MS Excel, MS Word, MS PowerPoint, MS Access.  
**Engineering Applications:** MATLAB, CADENCE, PSPICE, LTSPICE, VHDL, Verilog and Knowledge of PC hardware and Networking.

**CAD Applications:** Mentor Graphics (Design Architect, Quicksim, Autologic-II), VSIM, VHDL simulator of Mentor Graphics, Leonardo for VHDL synthesis, Cadence tools for digital circuit design, Synplicity(ispDesignExpert) for lattice semiconductor CPLDs, ArcGIS-GIS Software.

**Network and hardware skills:** UNIX and Windows NT network administration, Network setup and topology, UNIX and PC based servers and workstations.

## LANGUAGES

Bengali - Mother Tongue

English –Fluent

Russian - Moderate

## BEHAVIORAL STIMULI

Hardworking, confident and efficient in time management.

Self motivated, willing to learn and adapt to tasks and situations.

Can work as part of a team or independently with sincerity.

Good in analytical and perceptual skills.

## INTERESTS

I have been very actively participating in all activities of VISION-2021 FOURM with an aim to building hunger free and poverty free Bangladesh by 2021.

I am keen to develop international relationship with other countries to realize our lifelong dream ‘Sonar Bangla’.

I am keen to organize an International Math Olympiad(IMO) in Bangladesh.

I am actively engaged in ULAB Social welfare club that provides support to flood affected people, providing cloths to poor people etc.

Along with my some of students I teach basic IT skills to homeless children in Dhaka city.

I regularly organize Lego Robotics training session for high school students in weekends.

Volunteering in International Symposium on Low Power Electronics and Design (ISLPED’ 07) Conference, Portland, Oregon.

Volunteering Robotics Club, Portland State University, Oregon, USA.

Volunteering Multnomah Community Health Center, Oregon, USA

Volunteering for conducting seminars and tutoring sessions on Orcad PSPICE in undergraduate IEEE certified technical event, Portland, Oregon, USA.

Volunteering for Kids Bangla School, Oregon, USA

Hobbies include Hiking, Volunteering, Stamp collection, Traveling, Swimming, Reading, and Music.