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Md. Ruhul Amin

Education

Shahjalal University of Science & Technology, Sylhet.

- B.Sc. (Engg.) in Computer Science and Engineering, April 2007.
- CGPA: 3.96 out of 4.0 (Record Score in the History of the Dept. of CSE)
- Position: Ranked first in a class of 108 students.
- Thesis Topic: Designing Algorithms in Quantum Computation.
- Supervisor: Mr. Chandan Kumar Karmakar, Assistant Professor, SUST.

Notre Dame College, Dhaka.

- Higher Secondary Certificate (H.S.C), 2001.
- First Division with Star Marks and Distinctions in 2 subjects.
- Total Marks: 785 out of 1000.

Motijheel Govt. Boys High School, Dhaka.

- Secondary School Certificate (S.S.C), 1999.
- First Division with Star Marks and Distinctions in 4 subjects.
- Total Marks: 828 out of 1000.

Research Interests

Machine Learning and Natural Language Processing.

Distributed Computing for Large Scale Search Engine.

Theory of Quantum Computation, Quantum Complexity Classes.

Notable Awards and Scholarships

Prime Minister Award

A Special Award from the Honorable Prime Minister of the Government of the People's Republic of Bangladesh (on 11th November, 2012) for outstanding research work on "Mongol Dip" (A Bilingual Screen Reading Software for the Visually Impaired People) for creating a system for the inclusion of visually impaired people in the mainstream economy of Bangladesh using ICT and taking Bangladesh forward.

mBillionth South Asian Award

South Asian Award, Delhi, India, July 2010. For Mobile SMS Based Registration System of University Admission Test

Shahjalal University of Science & Technology Undergraduate Scholarship

Academic Scholarship for 4 consecutive years during BSC (Engg) degree in the Dept. of CSE for outstanding academic result.

Directorate of Primary Education (DPE) Government Scholarship

Placed First (Talent pool) in Primary Scholarship, Dhaka Division [1993]

Career Summary

Current Positions:

- Shahjalal University of Science and Technology, Sylhet –3114, Bangladesh.
- Assistant Professor, Dept. of CSE [July, 2009 - Continue]
- Principal Researcher, Information Retrieval Lab, Dept. of CSE
- Coordinator, CRTC, Dept. of CSE, SUST
- Assistant Provost, Second Student Hall, SUST

Previous Positions:

- AfriGIS SA, Dhaka Office.
- Team Leader, iSearch Project [June, 2008 – June, 2009]
- Project Description: Small scale development of free text search engine, geo-spatial search engine, and distributed web crawler.
- Software Engineer, The GRID [May, 2007 – May, 2008]
- Project Description: Social Networking Application. Launched by Vodacom, SA, and won The 3rd Annual Comms MEA New Telecommunication Service of the Year, 2008 in Dubai.

Institute of Business and Information Technology, Zinda Bazar, Sylhet.

- Guest Faculty (Part Time) [July, 2006 – December, 2006]

Akij Institute of Technology, Mojumdari, Sylhet.

- Guest Faculty (Part Time) [January, 2006 – June, 2006]
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Publications

Notable Journal Papers

1. **Md. Ruhul Amin**, Asif Mohammed Samir, Madhusodan Chakraborty and Md. Mahfuzur Rahaman. Article: An Efficient Unicode based Sorting Algorithm for Bengali Words. International Journal of Computer Applications 24(7):11–16, June 2011. Published by Foundation of Computer Science. Impact Factor: 0.814. Web Link: <http://www.ijcaonline.org/archives/volume24/number7/2967-3966>.
2. **Md. Ruhul Amin**, Shahidul Islam, Towhidul Islam Talukder, Chandan Kumar Karmaker. Article: Quantum Mechanics: The Driving Wheel of Quantum Computation. Published in the SUST STUDIES, Vol. 7, 2007, Journal of Shahjalal University of Science & Technology, Sylhet, Bangladesh.
3. Md. Eamin Rahman, Rashedul Islam, Shahidul Islam, Shakhinur Islam Mondal, **Md. Ruhul Amin**. Article: MiRANN: A Reliable Approach for Improved Classification of Precursor microRNA using Artificial Neural Network Model. Genomics, Volume 99, Issue 4, April 2012, Pages 189 - 194. Published by Elsevier. Impact Factor 3.327. Web Link: <http://www.sciencedirect.com/science/article/pii/S0888754312000262>
4. **Md. Ruhul Amin**, Alamgir Kabir, Shazadur Rahman Khan, Ruby Paul. Article: Design and Implementation of Mongol Dip: Software for the People with Visual Impairments, Accepted to be Published in the SUST STUDIES, June, 2102. Journal of Shahjalal University of Science & Technology, Sylhet, Bangladesh.
5. **Md. Ruhul Amin**, Mohiul Alam Prince, Md. Akter Hossain. Article: WEBTracker: A Web Crawler for Maximizing Bandwidth Utilization, Accepted to be Published in the SUST STUDIES, June, 2012. Journal of Shahjalal University of Science & Technology, Sylhet, Bangladesh.

Research Experience

Working as a Principal Researcher on Information Retrieval [2009-Continue]

- Developing Location Based Information Sharing and Searching Network.
- Designed and developing the Architecture of Small Scale Search Engine

Worked with Natural Language Processing Thesis Group [2009-Continue]

- Working on Keyword and Title Extraction Algorithm of Bengali Document
- Developed Bengali Sorting Algorithm
- Developed Bengali Spell Checking Algorithm.
- Designed the Architecture of Text to Speech Synthesis Software Subachan

Worked with Distributed Computing Thesis Group [20011-12]

- Developed MPI-Vina for Diskless Cluster Computation.
- Enhanced the Performance of Alchemi Grid Framework using Memcached.

Worked with Human Computer Interaction Thesis Group [2009-10]

- Developed Software for People with Visually Impairments.
- Used Bengali and English Text to Speech Module for Audio Assistance.
- Used Minimal Key Operation for Working with Documents and E-mail.

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Worked on SMS Based Digital Registration System for University Admission [2009]

- Architecture for Digital Registration System.
- Developed Algorithm for Mapping Two Primary Key Less Databases.
- Developed Fuzzy Pattern Matching Algorithm for Human Name.

ACM Programming Achievements

ACM Programming Coach for the Team SUST Spondon for ICPC Regional 2012

Participated in ACM World Finals 2012 as the Co-Trainer of SUST Palindrome

Problem Setter and Member of judging Panel, SIUPC-2011, SUST, Sylhet

Placed 5th in ACM ICPC Regional Contest Dhaka Site (Bangladesh) - 2006 held in North South University, Bangladesh.

Participated in ACM ICPC Regional Contest Coimbatore Site (India) - 2005 and 2006 held in Amrita University, India.

Placed 8th in ACM ICPC Regional Contest Dhaka Site (Bangladesh) - 2005 held in North South University, Bangladesh.

References

Dr. M. Zafar Iqbal

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