

CURRICULUM VITAE

Dr. MD. RASHEDUL ISLAM

Visiting Researcher,

School of Computer Science and Engineering, University of Aizu,
Fukushima, Japan

Associate Professor,

Dept. of CSE, University of Asia Pacific, Dhaka, Bangladesh

PhD, University of Ulsan, South Korea

M.Sc., University of Borås, Sweden

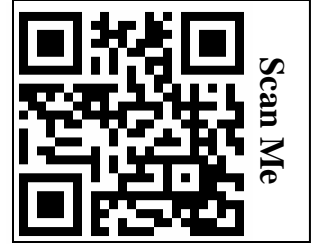
B.Sc. (Hons), University of Rajshahi, Bangladesh

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Short Biography

Dr. Md. Rashedul Islam received the B.S. degree in computer science and engineering from the University Rajshahi, Rajshahi, Bangladesh, in 2006, the M.S. degree in informatics from the Högskolan i Borås (University of Borås), Borås, Sweden, in 2011, and Ph.D. degree in electrical, electronic, and computer engineering at the University of Ulsan, Ulsan, South Korea, in 2016. He is currently working as a Visiting researcher in School of Computer Science and Engineering, University of Aizu, Japan also an Associate Professor (on leave) in the Department of Computer Science and Engineering, University of Asia Pacific (UAP), Dhaka, Bangladesh. In previous, he worked as a graduate research assistant in Embedded system lab, University of Ulsan, South Korea, Assistant professor in the Department of Computer Science and Engineering, University of Asia Pacific (UAP), Dhaka, Bangladesh, and Lecturer in the Department of Computer Science and Engineering, Leading University, Sylhet, Bangladesh. Also, he has a good experience in professional IT system analysis and development.

Research Interest

Signal & Image processing | Machine learning | Data Clustering | Feature selection & Optimization | Human Computer Interaction | Health informatics | Disease diagnosis | Data-driven bearing fault diagnosis and prognostics | parallel algorithm/processing

Career Objective:

- Going ahead to be a good researcher as well as good academician for facing new challenges in IT research and development.



ResearchGate: 16.12

https://www.researchgate.net/profile/Dr_Md_Rashedul_Islam



Google Scholar: 238 citations

<https://scholar.google.com/citations?user=V-HK1CEAAAAJ&hl=en&authuser=1>



ORCID

<https://orcid.org/0000-0001-8676-6338>

Summary of CV:

Topic	Page #	Remarks
Short Biography	1	
Research Interest	1	
Academic Qualification	3	Highest Degree: Ph.D. in Computer Engineering
Ongoing Research	3	
Publications	3-9	Total number of publications: 54 (int. journal(20), conference(33), book(1))
Reviewer of International Journal and Conference	9	Reviewer of several reputed international journals and conferences
Thesis & project Supervisions	10	Supervised to several M.Sc. and B.Sc. thesis groups
Project & Research Funding	10	
Received Awards	11	
Job Experiences:	11-12	Teaching and research experience is almost 10 years . Profession experience is almost 3 years
Other Experience	12-13	Served to several administrative and organizing bodies
Conducted Courses:	13	Undergraduate and Master's level
Participation in programming contest, IT Fair & Workshop:	13	Most of those are during B.Sc. degree
Project Done	14	During B.Sc. degree and later
Commercial Software Development:	14-16	
Design and Developed commercial Website	16	
Programming Skills	17	
Personal Information:	17	
References	18	

****Following pages presents the details of CV***

Academic Background:

1998	Secondary school certificate from Gabtali Pilot high school, Bogra, under Rajshahi board and obtained First Division .
2000	Higher secondary certificate from Govt. A. H. College, Bogra under Rajshahi board and obtained First Division
2004 (held 2006) (Jan 2001- Jun 2006)	B. Sc. (Hons) in Computer Science and Engineering, Rajshahi University. And Obtained 1st Class (3rd) Thesis: Speaker Identification System Using Eigenface Classification Engine
2011 (Jan 2010 – 18 May 2011)	M.Sc. (Major in Informatics) University of Borås (Högskolan i Borås), Sweden. Thesis: Evaluations of the parallel extensions in .NET 4.0 Thesis link: http://hdl.handle.net/2320/8209
2016 (1 Sep 2013 - 19Aug 2016)	PhD, Embedded System Lab, University of Ulsan, South Korea Thesis: Discriminant Fault Feature Selection and Reliable Online Bearing Fault Diagnosis System using Signal Processing and Machine Learning Techniques

Ongoing research

- Parkinson's disease detection and diagnosis using hand writing, hand movement data analysis.
- Gestural Input based non-touch human computer interaction.
- Human computer interaction using EMG and EEG signal.
- Health informatics based on machine learning
- Machine learning and Deep learning based elderly people monitoring system
- Fault detection and diagnosis of induction motor using signal analysis and machine learning.
- Feature selection for supervised and unsupervised learning.
- Supervised and Unsupervised machine learning.
- Enhancing supervised classification algorithm.

Publications (summary):

Book (1);

International Journals (20): 2017(3), 2016(7), 2015(2), 2014(3), 2012(1), 2011(3), 2010(1)

International Conferences (30): 2018(7), 2017(8), 2016(2), 2015(2), 2014(6), 2009(3), 2006(2)

Korean Conferences (3): 2014(2), 2013(1)

Publications (details):

International Journal (20):

1. 2017: Dileep K. Appana, **Rashedul Islam**, Sheraz A. Khan, Jong-Myon Kim, A video-based smoke detection using smoke flow pattern and spatial-temporal energy analyses for alarm systems, **Information Sciences**, Volumes 418–419, December 2017, Pages 91-101, ISSN 0020-0255. (**SCI, IF=4.832**)
2. **2017:** Manjurul Islam, **Rashedul Islam** and Jong-Myon Kim, “A Hybrid feature selection scheme based on local compactness and global separability for improving roller bearing diagnostic performance”, *Artificial Life and Computational Intelligence*, Volume 10142 of the series Lecture Notes in Computer Science (LNCS) pp 180-192.
3. **2017:** Dileep Appana, **Rashedul Islam** and Jong-Myon Kim, “Reliable Fault Diagnosis of Bearings Using Distance and Density Similarity on an Enhanced k-NN”, *Artificial Life and Computational Intelligence*, Volume 10142 of the series Lecture Notes in Computer Science (LNCS) pp 193-203.
4. **2016:** **Md. Rashedul Islam**, Islam, J. Uddin, J.-M. Kim, "Acoustic Emission Sensor Network Based Fault Diagnosis of Induction Motors Using a Gabor Filter and Multiclass Support Vector Machines," **Ad Hoc & Sensor Wireless Networks (AHSWN)**, Vol. 34, pp. 273-287, Dec. 2016. (**SCIE, IF=1.043**)
5. 2016: Md. Sharif Uddin, **Rashedul Islam**, Sheraz Ali Khan, Jaeyoung Kim, Jong-Myon Kim, Seok-Man Sohn and ByeongKeun Choi, “Distance and Density Similarity Based Enhanced k-NN Classifier for Improving Fault Diagnosis Performance of Bearings”, **Shock and Vibration**, vol. 2016, Article ID 3843192, 11 pages, Oct 2016. doi:10.1155/2016/3843192 (**SCIE, IF 1.857**)
6. **2016:** **Md. Rashedul Islam**, Md. Sharif Uddin, Sheraz Khan, Jong-Myon Kim, and CheolHong Kim, “Multi-core Accelerated Discriminant Feature Selection for Real-time Bearing Fault Diagnosis”, *Trends in Applied Knowledge-Based Systems and Data Science*, LNCS, vol. 9799, pp 645-656.
7. **2016:** Myeongsu Kang, **Rashedul Islam**, JaeYoung Kim, Jong-Myon Kim, Michael Pecht, “A Hybrid Feature Selection Scheme for Reducing Diagnostic Performance Deterioration Caused by Outliers in Data-Driven Diagnostics”, **IEEE Transaction on Industrial Electronics (TIE)**, VOL. 63, NO. 5, MAY 2016, (**ISI-SCI, IF: 7.05, JCR=0.8%**)
8. **2016:** **Rashedul Islam**, Jia Uddin, Jong-Myon Kim, “Texture Analysis Based Feature Extraction Using Gabor Filter and SVD for Reliable Fault diagnosis of an Induction Motor”, *International Journal of Information Technology and Management*, In press, (**SCOPUS**)
9. **2016:** Jia Uddin, **Md. Rashedul Islam**, Jong-Myon Kim, “A Two Dimensional Fault Diagnosis Model of Induction Motors using Gabor Filter on Segmented Images”, *International Journal of Control and Automation*, Vol. 9, No. 1, January 2016, (**SCOPUS**)
10. **2016:** **Rashedul Islam**, Sheraz Ali Khan, and Jongmyon Kim, “Discriminant feature distribution analysis-based hybrid feature selection for online bearing fault diagnosis in

- induction motors”, **Journal of Sensors**, vol. 2016, pp. 1-16, 2016, Article ID 7145715, **(IF: 2.057, ISI-SCIE)**
11. **2015: Md. Rashedul Islam**, Sheraz A. Khan, and Jong-Myon Kim, " Maximum class separability-based discriminant feature selection using a GA for reliable fault diagnosis of induction motors", Lecture Notes in Artificial Intelligence LNAI, vol 9227, pp 526-537, **(SCOPUS)**
 12. **2015: Md. Rashedul Islam**, Jong-Myon Kim, A Centroid-GPS Model to Improving Positioning Accuracy for a Sensitive Location-Based System, Lecture Notes in Electrical Engineering Volume 331, 2015, pp 187-196, Mar 05 2015. **(SCOPUS)**
 13. **2014: Myeongsu Kang**, Shohidul Islam, **Rashedul Islam**, and Jong-Myon Kim, “Accelerating the formant synthesis of haegeum sounds using a general-purpose graphics processing unit”, **Multimedia Tools and Applications**, Springer, October, 2014, DOI 10.1007/s11042-014-2297-3. **(IF: 1.54, ISI-SCIE)**
 14. **2014: Jia Uddin**, **Rashedul Islam**, and Jong-Myon Kim, “Texture Feature Extraction Techniques for Fault Diagnosis of Induction Motors”, **Journal of Convergence**, vol. 5, no. 2, pp. 15-20 June 2014
 15. **2014: Md. Rashedul Islam**, Jong-Myon Kim, “An Effective Approach to Improving Low-Cost GPS Positioning Accuracy in Real Time Navigation”, **The Science World Journal**, vol-2014 pp-1-8, June 2014, Article ID 671494, doi:10.1155/2014/671494 **(IF: 1.73 (2014), ISI-SCIE)**
 16. **2012: Md. Rashedul Islam**, Alope Kumar Shah, Md. Rofiqul Islam, “Experimental Evaluation of parallelism in real time execution”, **Research Notes in Information Science** (ISSN: 2093-1956). Vol.10, October 2012
Download Link: <http://www.aicit.org/rnis/global/ppl.html?jname=RNIS>
 17. **2011: Md. Shafiul Azam**, **Md. Rashedul Islam**, Md. Omar Faruqe, “Determination of the Traveling Speed of a Moving Object of a Video Using Background Extraction and Region Based Segmentation”, **International Journal of Computer Science and Information Security(IJCSIS)**, Vol. 9, No. 4, April 2011, ISSN 1947-5500, USA
Download Link: <http://sites.google.com/site/ijcsis/vol-9-no-4-apr-2011>
 18. **2011: Md. Rashedul Islam**, Md. Rofiqul Islam, Md. Shariful Alam, Md. Shafiul Azam “Experiences and comparison study of EPC & UML for Business Process & IS Modeling ”, **International Journal of Computer Science and Information Security (IJCSIS)** Volume 9 No. 3, March 2011, page-125-133, ISSN: 1947-5500, USA
Download Link: <http://sites.google.com/site/ijcsis/vol-9-no-3-mar-2011>
 19. **2011: Md. Shariful Alam** , **Md. Rashedul Islam** , Md. Rofiqul Islam “Organizational improvement using Organizational paradigms with the support of people paradigms”, **International Journal on Computer Science and Engineering (IJCSE)**, Vol. 3, Issue 2, 2011, ISSN : 0975-3397, India.
Download Link: <http://www.enggjournals.com/ijcse/issue.html?issue=20110302>
 20. **2010: Md. Rashedul Islam**, Md. Rofiqul Islam, Tohidul Arafhin Mazumder “Mobile Application and Its Global Impact”, **International Journal of Engineering & Technology**”, **International Journal of Engineering & Technology IJET-IJENS** Vol. 10 Issue. 06,

December 2010, ISSN: 2077-1185, Pakistan. (**SCOPUS**)

Download Link: <http://www.ijens.org/IJET%20Vol%2010%20Issue%2006.html>

International Conference (30):

1. 2018: Md. Atiqur Rahman, Syed Islam, Jungpil Shin, Md. Rashedul Islam, “Histogram alternation based digital image compression using base-2 coding” Inter. Conf. Digital Image Computing: Techniques and Applications, 10-13 December, Canberra, Australia (Accepted)
2. 2018: Md. Atiqur Rahman, M. M. Fazle Rabbi, Md. Mijanur Rahman, Md. Masudul Islam, **Md. Rashedul Islam*** “Histogram modification based lossy image compression scheme using Huffman coding”, 4th International Conference on Electrical Engineering and Information & Communication Technology (iCEEiCT 2018), Dhaka, Bangladesh, Sep 13-15, 2018.
3. 2018: **Md Rashedul Islam**, Md Abdur Rahim, Hafeza Akter, Raihan Kabir, Jungpil Shin, “Optimal IMF Selection of EMD for Sleep Disorder Diagnosis using EEG Signals”, In The 3rd International Conference on Applications in Information Technology (ICAIT’18), November 1–3, 2018, Aizu Wakamatsu, Japan. ACM, New York, NY, USA, Article 20, 6 pages. <https://doi.org/10.1145/3274856.3274876> (**Best Paper Award**)
4. 2018: Md Abdur Rahim, Jungpil Shin, and **Md Rashedul Islam** “Human Machine Interaction based on Hand Gesture Recognition using Skeleton Information of Kinect Sensor” In The 3rd International Conference on Applications in Information Technology (ICAIT’18), November 1–3, 2018, Aizu-Wakamatsu, Japan. ACM Conf., Article 4, 5 pages. <https://doi.org/10.1145/3274856.3274872>
5. 2018: Jungpil Shin, Md Abdur Rahim, **Md. Rashedul Islam** “A Robust User Authentication System Based on Hand Gesture and EMG Signal Analysis”, ICFSP 2018 (IEEE) France (Accepted) (Not Presented)
6. 2018: **Md Rashedul Islam**, Rasel Ahmed Bhuiyan, Ummey Kulsum Mitu, Jungpil Shin, “Hand Gesture Feature Extraction using Deep Convolutional Neural Network for Recognizing American Sign Language”, 2018 4th International Conference on Frontiers of Signal Processing (ICFSP 2018), pp. 115-119, France Sep 2018.
7. 2018: Md. Atiqur Rahman, Jungpil Shin, Alope Kumar Saha, **Md. Rashedul Islam***, “A Novel Lossless Coding Technique for Image Compression”, 2018 Joint 7th International Conference on Informatics, Electronics & Vision (ICIEV) and 2018 2nd International Conference on Imaging, Vision & Pattern Recognition (icIVPR), Page 82-86, June 25-28, 2018 Japan.
8. 2017: Rasel Ahmed Bhuiyan, Abdul Kawsar Tushar, Akm Ashiquzzaman, Jungpil Shin and **Md Rashedul Islam***, “Reduction of Gesture Feature Dimension for Improving the Hand Gesture Recognition Performance of Numerical Sign Language”, 20th International Conference On Computer and Information Technology (ICCIT 2017), December 22-24, Dhaka, Bangladesh.
9. 2017: Abdul Kawsar Tushar, Akm Ashiquzzaman, and **Md. Rashedul Islam***, “Faster Convergence and Reduction of Overfitting in Numerical Hand Sign Recognition using DCNN”, 5th IEEE Region 10 Humanitarian Technology conference 2017, Dec 21-23, Dhaka, Bangladesh (**Best Paper Award**)

10. 2017: Mohammad Sakib Mahmud, Mahbub Arab Majumder, Abdul Kawsar Tushar, Md. Mahtab Kamal, Akm Ashiquzzaman, and **Md. Rashedul Islam***, “Real-Time Feedback-Centric Nurse Calling System with Archive Monitoring using Raspberry Pi” , 2017 International Conference on Networking, Systems and Security (NSysS 2017), Dhaka, Bangladesh December 18-20, 2017
11. 2017: Abdul Kawsar Tushar, Akm Ashiquzzaman, **Md. Rashedul Islam**, Afia Afrin: "A Novel Transfer Learning Approach upon Hindi, Arabic, and Bangla Numerals using Convolutional Neural Networks", International Conference On Computational Vision and Bio Inspired Computing (ICCVBIC 2017), 2017 in Tamil Nadu, India, Accepted. (Springer - Lecture Notes in Computational Vision and Biomechanics; indexed in Scopus)
12. 2017: Akm Ashiquzzaman, Abdul Kawsar Tushar, **Md. Rashedul Islam**, Dongkoo Shon, Kichang Im, Jeong-Ho Park, Dong-Sun Lim, and Jongmyon Kim, “Reduction of Overfitting in Diabetes Prediction Using Deep Learning Neural Network”, 7th iCatse International Conference on IT Convergence and Security, 2017 (LNEE), 25-28 Sep 2017, Korea, Accepted
13. **2017:** Hanif Bhuiyan, Jinat Ara, Rajon Bardhan, **Md. Rashedul Islam**, “Retrieving YouTube Video by Sentiment Analysis on User Comment”, *2017 IEEE International Conference on Signal and Image Processing Applications (ICSIPA)*, Kuching, 2017, pp. 474-478
14. **2017:** Young-Hun Kim, M M Manjurul Islam, **Md. Rashedul Islam**, Jong-Myon Kim, “Genetic Algorithm Based Discriminant Feature Selection for Improved Fault Diagnosis of Induction Motor”, The 19th Int'l Conf on Artificial Intelligence ICAI'17 (CSREA Press), July 17-20, 2017 in Las Vegas, Nevada, USA.
15. **2017: Md Rashedul Islam**, Abdul Kawsar Tushar and Jong–myon Kim, “Efficient Bearing Fault Diagnosis by Extracting Intrinsic Fault Information using Envelope Power Spectrum”, **2017 IEEE International Conference on Imaging, Vision & Pattern Recognition** , Dhaka, Feb, 2017
16. **2016: Md Rashedul Islam**, M M Manjurul Islam and Jong–myon Kim, “Feature Selection Techniques for Increasing Reliability of Fault Diagnosis of Bearings”, 9th International Conference on Electrical and Computer Engineering (ICECE), 2016 ICECE2016, Dhaka, Dec 2016.
17. 2016: **Md. Rashedul Islam**, Md. Sharif Uddin, Sheraz Khan, Jong-Myon Kim, and Cheol-Hong Kim, “Multi-core Accelerated Discriminant Feature Selection for Real-time Bearing Fault Diagnosis”, Trends in Applied Knowledge-Based Systems and Data Science, LNCS, vol. 9799, pp 645-656, Aug 2-4, Morioka, Japan.
18. **2015:** Md. Sharif Uddin, **Rashedul Islam**, Jong-Myon Kim, Cheol-Hong Kim, “Many-core Accelerated Local Outlier Factor (LOF) based Classifier in Bearing Fault Diagnosis”, 1^{8th} International Conference on Computer and Information Technology (ICCIT), pp. 445-449, 21-23 December 2015.
19. **2015: Md. Rashedul Islam**, Jia Uddin, Jong-Myon Kim, “Fault Diagnosis of an Induction Motor Using a Gabor Filter and Singular Value Decomposition Based Feature Extraction Method”, 2015 International Conference on Platform Technology and Service (PlatCon-15), pp 150-151, Jan 27, Jeju 2015

20. **2014:** Jia Uddin, **Md Rashedul Islam**, Jong-Myon Kim, “Reliable Fault Diagnosis of Induction Motors using 2D Signal Processing Techniques”, 8th International Conference on Electrical and Computer Engineering (ICECE 2014), Dhaka, 20-22 December 2014.
21. **2014:** **Md Rashedul Islam**, Jong-Myon Kim, “A New Cooperative-GPS Approach to Improve GPS Positioning Accuracy for Location Based System”, The 2nd FTRA International Conference on Ubiquitous Computing Application and Wireless Sensor Network (UCAWSN-14), July 7-10, Jeju, 2014
22. **2014:** **Rashedul Islam**, Jia Uddin, Jong-Myon Kim, “Reliable Fault Diagnosis of Induction Motors using an Acoustic Emission Sensor and Signal Processing Techniques”, The 2nd FTRA International Conference on Ubiquitous Computing Application and Wireless Sensor Network (UCAWSN-14), July 7-10, Jeju, 2014
23. **2014:** **Rashedul Islam**, Jong-Myon Kim, "Reliable RGB color image watermarking using DWT and SVD," International Conference on Informatics, Electronics & Vision (ICIEV), 2014, pp.1,4, 23-24 May 2014.
24. **2014:** **Rashedul Islam**, Jong-Myon Kim, “Direction Averaging Method for Improving GPS Positioning Accuracy in Real-Time Navigation”, The 6th FTRA International Symposium on Advances in Computing, Communications, Security, and Applications (ACSA-14), April 2014
25. **2014:** Md Shohidul Islam, **Md Rashedul Islam**, Jong-Myon Kim, “A accelerating Haegeum’s Sound Synthesis System using Graphics Processing Unit” The 6th FTRA International Symposium on Advances in Computing, Communications, Security, and Applications (ACSA-14), April 2014
26. **2009:** Saleh Ahmed, **Md. Rashedul Islam**, Md. Shafiul Azam “Bangla Hand Written Digit Recognition Using Supervised Locally Linear Embedding Algorithm and Support Vector Machine”, 12th International Conference on Computers and Information Technology, 2009. ICCIT '09. Print ISBN: 978-1-4244-6281-0, Index By IEEE Explore.
Download Link: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5407269
27. **2009:** Saleh Ahmed, Shamim Ahmad, Md. Omar Faruque, **Md. Rashedul Islam** “EMG Signal Decomposition Using Wavelet Transformation with Respect to Different Wavelet and a Comparative Study”, 2nd International Conference on Interaction Sciences: Information Technology, Culture and Human, Korea, ACM New York, NY, USA ©2009, ISBN: 978-1-60558-710-3.
Download Link: <http://portal.acm.org/citation.cfm?doid=1655925.1656058>
28. **2009:** **Md. Rashedul Islam**, Md. Shafiul Azam, Saleh Ahmed “Speaker Identification System Using PCA & Eigenface”, 12th International Conference on Computers and Information Technology, 2009. ICCIT '09. Print ISBN: 978-1-4244-6281-0, Index By IEEE Explore.
Download Link: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5407129
29. **2006:** **Md. Rashedul Islam**, A.N.K. Zaman, Shamim Ahmad, Md. Khademul Islam Molla “Speaker Identification System Using Eigenface Classification Engine” 9th International Conference of Computer and Information Technology (ICCIT 2006), ISBN: 984-23-3828-1

30. **2006:** Sangeeta Biswas, **Md. Rashedul Islam**, Shamim Ahmed, Md. Khademul Islam Molla “Text-Dependent Speaker Identification System Using MFCC and HMM” 9th International Conference of Computer and Information Technology (ICCIT 2006), ISBN: 984-23-3828-1

Korean Conference (3):

31. **2014:** **Md. Rashedul Islam**, Jong-Myon Kim, “Texture Feature Analysis based Fault Diagnosis of Induction Motors”, KISPS Summer Conference 2014, pp 153-157, 20-21 June 2014, Degu, South Korea.
32. **2014:** Md Shohidul Islam, **Md Rashedul Islam**, Fahmid Al Farid, Jong-Myon Kim, “Spectral Modeling Synthesis of Haegeum Using GPU” Winter Conference of the Korea Society of Computer and Information No. 22, Issue 1, 2014 (**Best Paper Award**)
33. **2013:** **Rashedul Islam**, Jong-Myon Kim, “Direction Averaging Method for **Improving** GPS Positioning Accuracy in Real Time Navigation”, 2013 Korea Engineering Arts Society Conference Vol. 11 no. 1, 2013 (**Best Paper Award**)

Book (1):

1. **Power of Parallelism in .NET,**

Author: **Md. Rashedul Islam**

ISBN-13: 978-3-659-94849-7

ISBN-10: 3659948497

Published on: 2016-11-03

Ph.D. Thesis

- Title: Discriminant Fault Feature Selection and Reliable Online Bearing Fault Diagnosis System using Signal Processing and Machine Learning Techniques

M.Sc Thesis:

- Title: Evaluations of the parallel extensions in .NET 4.0
link: <http://hdl.handle.net/2320/8209>

Undergraduate (B.Sc) Thesis:

- Title: Speaker Identification System Using Eigenface Classification Engine

Reviewer of International Journal and Conference

- IEEE Access
- Measurement, Elsevier
- Multimedia tools and application, Springer
- Cluster Computing, Springer
- Shock and Vibration, Hindawi
- Journal of Information Processing Systems
- ICCIT 2018 (PC Member)
- icIVPR 2017 (PC Member)

Also I have served as session chair in several international conferences.

Thesis Supervisions

- Enhanced denoising of sEMG signal for efficient human action recognition (B.Sc. thesis at University of Aizu)
- PCA and ICA Based Feature Extraction for Cardiac Arrhythmia Disease Diagnosis (M.Sc. thesis at UAP, Fall 2017)
- Enhanced Sleep Disorder Detection Method Using DWT and Feature Selection Technique (M.Sc. thesis at UAP, Fall 2017)
- Feature Extraction from EEG signal Using EMD for Sleep Disorder Detection (M.Sc. thesis at UAP, Fall 2017)
- Video Based Smoke Detection Using Smoke Growth Analysis for Fire Alarm System (B.Sc. thesis at UAP, Fall 2017)
- A Fault Diagnosis Model of Bearing using Convolutional Neural Network (B.Sc. thesis at UAP, Fall 2017)
- Reduction of Gesture Feature Dimension for Improving the Hand Gesture Recognition Performance of Numerical Sign Language (B.Sc. thesis at UAP, Spring 2017).
- Enhance k-NN Classification algorithm for improving classification performance (Ph.D. student at University of Ulsan).
- Efficient Smoke detection model using CCTV footage (Ph.D. student at University of Ulsan)
- Performance evaluation on Data partitioning and task partitioning in parallelism (M.Sc. student at UAP).
- Present Impact and future growth of E-commerce and e-business in developing country (M.Sc. student at UAP)
- Memory Efficient adaptive Distributed database management system using cost function (B.Sc. thesis at UAP)
- A New approach of space efficient and secure data storage mechanism using steganography (B.Sc. thesis at UAP).

Project Supervisions

- Online doctor appointment and patient queue control system
- Online home automation system for controlling 48 devices from remote place.
- Web-portal for Bangladesh.
- Microcontroller based Service Counter Queue Management for multiple counters.
- Automated Student and Teacher attendance using punch card and reader.

Project and Research Funding

- [Submitted] Japan JSPS Grant-In-Aid for Scientific Research proposal on “Machine learning based Parkinson’s Disease Detection and Diagnosis using Pen-tablet, and Smartwatch”, 2018.
- [Submitted] Japan JSPS Bilateral Joint Research Projects/Seminars (Japan-Korea) proposal on “A machine learning based fall detection and daily activity monitoring system for elderly people living alone”, 2018.
- [Submitted] Japan Fostering Joint International Research (B) (Japan-Bangladesh) proposal on “early prediction of lung disease and the progression of lung disease”, 2018.
- Established “Computer Vision and Pattern Recognition Lab” <http://cvprlab.uap-bd.edu/>, 2018.

- Funding for laboratory “Mobile Game Research and Development Lab” from ICT-Division, Ministry of Posts, Telecommunications and Information Technology, Government of Bangladesh, 2017
- Funding for project “Online home automation system for controlling 48 devices from remote place” from Institute of Energy, Environment, Research and Development (IEERD), University of Asia Pacific, 2012

Received Awards

- Best Paper Award, 3rd International Conference on Applications in Information Technology (ICAIT’18), 2018
- Research Fellowship, Visiting Researcher, University of Aizu, Fukushima, Japan, 2018
- Best Paper award, Winter Conference of the Korea Society of Computer and Information, South Korea
- Best Paper award, KISPS Summer Conference 2014, South Korea
- BK21 Scholarship, University Ulsan, South Korea, 2014-2016
- Full Scholarship including tuition fees, living expenses for pursuing Ph.D. in Computing Engineering, University Ulsan, South Korea, 2013-2016
- Swedish Govt. awards (full tuition fees) for MSc. in Informatics at Borås (Högskolan i Borås), Sweden, 2010-2011
- 3rd Position, Software and Project Exhibition 2006, Dept. of CSE, University of Rajshai, Bangladesh.
- Merit Scholarship from University of Rajshai, 2000-2004
- Merit Scholarship of Bangladesh Junior Level Scholarship Exam, 1996-1997

Job Experiences:

Total Teaching and research experience

- 1. Visiting Researcher (Affiliated with Pattern Processing Lab)**
School of Computer Science and Engineering
University of Aizu, Fukushima, Japan
Joining date: 01-04-2018 to Now
- 2. Associate Professor**
Dept. of Computer Science & Engineering
University of Asia Pacific, Dhaka, Bangladesh
Joining date: 16-10-2016 to Now (on leave)
- 3. Assistant Professor**
Dept. of Computer Science & Engineering
University of Asia Pacific, Dhaka, Bangladesh
Joining date: 09-10-2011 to 15-10-2016
- 4. Graduate Research Assistant**
Embedded System Lab
University of Ulsan, South Korea.
<http://eucs.ulsan.ac.kr>
Date: 01-09-2013 to 22-08-2016

5. Senior Lecturer

Dept. of Computer Science & Engineering
Leading University, Sylhet, Bangladesh
Joining date: 17-09-2009 to 01-10-2011

6. Lecturer

Dept. of Computer Science & Engineering
Leading University, Sylhet, Bangladesh
Joining date: 17-09-2007 to 16-09-2009

Professional experience

7. Software Engineering Consultant

Orbit Itech Ltd., Birmingham, UK
Duration: 01-Feb-2016 to till date

8. IT consultant

Arrowsoft, Sylhet, Bangladesh
Duration: Jan 2011 to June 2012

9. Chief Technical Officer

Firm: Orbit Solutions Ltd (Complete IT Solution Firm)
Niloy-60(2nd Floor), Dorga gate, Sylhet.
Duration: 01-03-2007 To 15-09-2007

10. Senior Developer

Firm: Orbit Solutions Ltd (Complete IT Solution Firm),
Niloy-60(2nd Floor), Dorga gate, Sylhet.
Duration date: 01-09-2006 To 28-02-2007

Other Experience

1. Secretary, Organizing committee, 19th International Conference on Computer and Information Technology 2017 (ICCIT2017)
2. Chair, Secretary, Organizing committee, ACM-ICPC Dhaka Regional Site 2017
3. Coordination, IEB Accreditation preparation committee 2018 of UAP.
4. Head, Self-Assessment Committee (SAC) of Dept. of CSE Under IQAC
5. Convener of Software and Hardware Club, Dept. of CSE
6. Coordinator, Admission Committee, Dept. of CSE
7. Treasurer, Bangladesh Advanced Computing Society.
8. Head (Acting), Leading University
9. Duration: 01-06-2008 to 19-04-2009
10. Adviser, Computer Club, Leading University, Sylhet
Duration: 15-06-2009 to 28-09-2011
11. Coordinator, Master of Science in Computer Science and Engineering (MCSE),
University of Asia, Pacific

Duration: 01-11-2011 to Now

12. Convener, Research and Publication Unit, Dept of CSE, University of Asia Pacific

Duration: 01-11-2011 to 31-03-2013

13. Convener, Software and Hardware club, Dept of CSE, University of Asia Pacific

Duration: 01-04-2013 to new

Conducted Courses:

- Pattern Recognition
- Automata and theory of computation
- Computer Architecture
- Operation System
- Software Engineering
- Data Structure
- DBMS
- Advanced DBMS (MCSE)
- Parallel Algorithm (MCSE)
- Structured Programming (C)
- Object Oriented Programming(C++)
- Compiler Design
- Data Communication
- Computer Network
- Web Development
- Graphics Design
- Internet & Ecommerce
- Microprocessor
- MIS
- DSP

Participation in programming contest, IT Fair & Workshop:

1. Participant, Workshop on Embedded system, IICT, BUET, Bangladesh, 2013.
2. Exhibitor, **AABISHKARER KHOJE** in **BASIS SOFTEXPO 2007**, Dhaka, Bangladesh.
3. Exhibitor, Software and Project Exhibition 2006, CSE, RU, Rajshahi, Bangladesh.
4. Exhibitor, **IISP** in **BASIS SOFTEXPO 2005**, Dhaka, Bangladesh.
5. Contestant, Southern Regional Programming Contest 2005, Khulna University, Khulna, Bangladesh.
6. Exhibitor, Academic Exhibition, Golden Jubilee Festival 2003, RU, Rajshahi, Bangladesh.
7. Contestant, AIUB Inter-University Programming Contest 2002, AIUB, Dhaka, Bangladesh.
8. Contestant, Inter Department Programming Contest 2001, CES, RU, Rajshahi, Bangladesh
9. Participant, Workshop on Relational Database Management System: A Practical Approach, CSE, RU, Rajshahi, Bangladesh.
10. Participant, Workshop on Algorithm and Programming Tricks, CSE, RU, Rajshahi, Bangladesh.
11. Participant, Workshop on VHDL Programming: A Practical Approach, CSE, RU, Rajshahi, Bangladesh.

Project Done:

1. Vehicle Tracking System Using GPS.

Made for a Japanese Software firm and Exhibit in **BASIS Softexpo 2008** by that Japanese Firm

2. Speaker Identification System(AI Based).

(Exhibit In IISP at BASIS Softexpo2005, Dhaka)

Language: MATLAB

3. Simulation of 8085 Assembly Language programming Kit.

(Ranked **3rd** in , Software and Project Exhibition 2006, CSE, RU, Rajshahi. And **Exhibit In AABISHKARER KHOJE at BASIS Softexpo2007, Dhaka)**

Language: VB

4. Web Based ticket booking and reservation System

Language: PHP, Database: MySQL

5. PC Based Home electronic device controller

Language: Visual C++.

Commercial Software Development:

1. Inventory and Sell Management System

Using: C#.Net and MS SQL

Client: BR Perfume, USA

2. Point of Sell for restaurant

Using: C#.Net and MySQL

Client: Orbit ITech Ltd. UK

3. Online Order management system for restaurant

Using: HTML, CSS, PHP, JS and MySQL

Client: Orbit ITech Ltd. UK

4. OMR result processing system

Using: C#.Net and MySQL

Client: University of Asia Pacific

5. Perfume wholesale Business Automation with Accounting

Using: C#.Net and MS. SQL Server

Client: B & R Perfume, USA.

6. Supermarket EPOS system with barcode scanner, Barcode Printer, POS Printer, Weighing Machine, Cash Drawer, Counter Display, Touch Screen. Server with many Till.

Client: Costless Ltd. In Ireland.

Using: VB6 and SQL Server

7. EPOS System for Pharmacy Automation

Using: VB6 and SQL Server

8. Online POS system

Supplier, Purchase, Stock Management, Sale, Customer Ledger, Supplier Ledger, Different Reports etc.

9. Doctor Chamber and Diagnostics center automation

Using: C#.Net and MS. SQL Server

10. University Automation (Admission, Exam, and Accounts Management Software of Leading University, Client Server Based)

Language: VB Database: SQL Server.

Client: Leading University, Sylhet, Bangladesh

11. Rajshahi University Account Seccession Automation Software (Client Server Based)

Language: VB Database: SQL Server.

Client: University of Rajshahi, Bangladesh.

12. Examination Management System

Language: VB, Database: SQL Server

Client: Board of Intermediate and Secondary education, Sylhet (To Manage SSC and HSC exam, Script collection form center All teacher database, automatic Examiner selection, Script Distribution, Script Collection, Examiner Payment etc.)

13. Smart Shop (Using Barcode generator and scanner)

Language: VB Database: Access

Client: 1) Maha, Nahar Tower, Nayasarak, Sylhet, Bangladesh

2) Take N Pay, Mirbox Tula, Sylhet, Bangladesh

3) Top in Town, Mirbox Tula, Sylhet, Bangladesh

4) Mumme, Nahar Tower, Nayasarak, Sylhet, Bangladesh

5) Mohona Shopping center, Bianny Bazar, Sylhet.

6) Samana Sopping center, Blue water, Zindabazar, Sylhet

7) Signature, Kumor para, Sylhet

8) Golden Man, Zindabazar, Sylhet.

14. Cold Store Management Software

Language: VB. Database: Oracle.

Client: Biswash Cold Store, Nator, Bangladesh

15. Client Server based Accounts Management Software

Language: VB Database: SQL Server

Client: ABASON Holdings Pvt. Ltd., Ambarkhana, Sylhet, Bangladesh

16. School Management Software

Language: VB, Database: Oracle.

Client: 1. Sunny Hill International School & College, Sylhet.

2. Shahjalal Jamia School & College, Mira Bazar, Sylhet.

Design and Developed Commercial Website

1. www.SiliconBasket.com
2. www.foreverbeaute.com
3. www.feedbelly.com/
4. www.aromatakeaway.co.uk/
5. www.currymerchants.co.uk/
6. www.bestworldfdn.com/
7. www.apexbd.net
8. www.oasisitbd.com/virsa
9. www.labibtelecom.com
10. www.mukhtarsupermarket.com
11. www.spicehousestroud.co.uk
12. www.bbchospital.org
13. www.cuminclub.se
14. www.restaurangmasahiro.se
15. www.thebridepride.com
16. www.cellarindiancuisine.co.uk
17. www.purbobaghrestaurant.com
18. www.regardsedgbaston.co.uk
19. www.spexmedical.co.uk
20. www.colourflash.com
21. www.e-jobworld.com
22. www.hdsikhpublishers.com
23. www.worldaviationsts.com
24. www.bise-sylhet.gov.bd
25. www.tastesofindianewbridge.co.uk

More Dynamic and Ecommerce Web site for different organization nationally and internationally

Programming Skills:

- **Programming Language:** MATLAB, Microsoft C#.NET, Visual Basic-6, Assembly Language(8085MP), Pascal, C, C++, Visual C++, Oracle Developer, Prolog.
- **Database:** MS SQL Server, MS Access, MySQL, Oracle.
- **Reporting:** Crystal Report, Data Report in VB
- **Networking:** a) Server configuration in Win 2000 Server/Win 2003 Server (Domain Controller, DNS Server, DHCP Server, File Server, Mail Server, Application Server, Terminal Service).b) Server Configuration in Linux platform(DNS Server, Web Server, Telnet, Mail Server.
- **Scripting Language/Web Technology:** HTML, PHP, ASP.Net(Learning), Drupal (Learning) Java Script, CSS, Macromedia Dream Weaver, Adobe Photoshop, Adobe Illustrator,
- **Operating System:** MS DOS, All Windows, Linux.

English Proficiency

1. Medium of Instruction was English in Undergraduate Program at Dept. of CSE, University of Rajshahi, Bangladesh
2. Medium of Instruction was English in Graduate Program(M.Sc) at University of Boras, Sweden.
3. Medium of Instruction in English at my teaching profession at University of Asia Pacific. We are strongly instructed to conduct Courses, supervision and discussion in English.
4. Medium of Instruction was English in PhD at School of Electrical, Electronics and Computer Engineering, University of Ulsan, Ulsan, South Korea

Personal Information:

Father's name : Md. Shakhawat Hossain.
Mother's name : Mrs. Rawshon Ara.
Date of birth : 01-06-1981.
Nationality : Bangladeshi By Birth.
Sex : Male.
Religion : Islam.
Marital status : Married.
Permanent Address : Village : Gabtali College Para Post : Gabtali,
P.S. : Gabtali, Dist.: Bogra, Bangladesh

Referees:

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(Dr. Md. Rashedul Islam)