Curriculum Vitae

Dr. M. Moshiul Hoque Professor Dept. of CSE, CUET Chittagong-4349, Bangladesh

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A. Personal Details

1. Name : Mohammed Moshiul Hoque

2. Father's Name : Md. Monirul Hoque

3. Mother's Name : Shahida Hoque4. Date of Birth : April 15, 1976

5. Place of Birth : Comilla, Bangladesh

6. Nationality : Bangladeshi7. Current Position : Professor

5. Permanent Address : Vill: Gopchar, Post: Gouripur, PS: Daudkandi,

Dist: Comilla, Bangladesh.

6. Present Address : Dept. of Computer Science & Engineering (CSE),

Chittagong University of Engineering &

Technology (CUET), Chittagong-4349, Bangladesh

7. Mailing Address : Dept. of Computer Science & Engineering,

Chittagong University of Engineering &

Technology (CUET), Chittagong-4349, Bangladesh

8. Marital Status : Double

9. Contact Cell No. : 880-1716-133019

10. Religion : Islam

B. Academic Records

Period	Name of the Institution	Degree/Major	Class/	CGPA/Marks
			Division	
October	Saitama University,	Doctor of	First	4.00/4.00
2009-	Saitama-3388570, Japan	Philosophy (Ph.		
September		D) in Science &		
2012		Engineering		
April	Bangladesh University of	M. Sc. in	First	3.71 out of
2002-July	Engineering & Technology	Computer		4.00
2005	(BUET), Dhaka-1000,	Science and		(88.25%)
	Bangladesh.	Engineering		
June	Chittagong University of	B.Sc. in Electrical	First	3.53 out of
1996-	Engineering & Technology	& Electronic	Class	4.00
January	(CUET), Chittagong-4349,	Engineering	$(2^{nd}$	(92.75%)
2001	Bangladesh		position)	

July 1992-	Comilla Victoria College,	Higher Secondary	First	707 out of
August	Kandirpar, Comilla-3500,	School	Class	1000 (70.7%)
1994	Bangladesh	Certificate/Scienc		
		e		
January	Gouripur Subal Aftab High	Secondary School	First	810 out of
1987-	School, Gouripur,	Certificate/Scienc	Class	1000 (81%)
April	Daudkandi, Comilla-3517,	e		
1992	Bangladesh			
January	Gouripur Primary Govt.	Primary School	Pass	
1982-	School, Comilla,	Certificate		
December	Bangladesh			
1986				

C. Language Skills

Name of the	Reading	Listening	Writing	Speaking
Language				
Bangla	Excellent	Excellent	Excellent	Excellent
English	Excellent	Excellent	Good	Good
Japanese	Good	Good	Reasonable	Good
Korean	Good	Good	Reasonable	Good
Hindi	Reasonable	Good	Reasonable	Good
Arabic	Good	Good	Good	Reasonable

D. Teaching Experiences (Starting from First Appointment)

Employe	r, city, country	Period of employment (month/year	Position	Type of work
Chittagong Engineering (CUET) Chittagong, Ba	University of & Technology ngladesh	March/ 2015 To till now	Professor	Conducting several theory, practical courses, Supervising Masters/Ph. D student, Conducting researches
Chittagong Engineering (CUET) Chittagong, Ba	University of & Technology ngladesh	From May/2013 To March /2015	Associate Professor	Conducting several theory, practical courses, Graduate & undergraduate student's thesis supervision
Employer Chittagong Engineering (CUET) Chittagong, Ba	University of & Technology	From July/2005 To May /2013	Assistant professor	Conducting several theory, practical courses, & undergraduate student's thesis supervision
Employer Chittagong Engineering	University of & Technology	From Sept/2001	Lecturer	Conducting several theory & practical courses in computer science &

(CUET)		engineering department
Chittagong, Bangladesh	То	
	June/2005	

F. Administrative Experiences

- Director of Student Welfare (DSW), CUET [March 2016-till now]
- General Secretary, CUET Teacher's Association [2015-2017]
- Head, Self Assessment Committee (SAC), Dept. of CSE, CUET [January 2016-till now]
- Head, Dept. of CSE, CUET [2015-2017]
- Provost, Bangabandhu Hall, CUET [2014~2016]
- Provost, Shahid Tareq Huda Hall [2014]
- Assistant Provost, Shaheed Mohammad Shah Hall, CUET
- Chairman, Purchase Committee, CUET
- President (Oct 2010-April 2011) of Bangladesh Association of Saitama University (BASU), Japan.
- Treasurer, CUET Club (2005-2006).
- Vice President, NewVic'94 Association, Dhaka, Bangladesh.
- General Secretary, Gopchar Surja Tarun Club, Comilla, Bangladesh [1998-2001].

G. Professional Experiences/Services

- Vice-Chair (Technical), IEEE Bangladesh Section (2019).
- Vice-Chair (Activity), IEEE Computer Society, Bangladesh Chapter (2019).
- Conference Coordinator, Institute of Electrical & Electronic Engineers (IEEE), Bangladesh Section [2018].
- TPC Chair, ECCE 2019
- Publication Chair, IEEE WIECON-ECE 2018
- TPC Chair, IEEE r10 HTC, 2018
- Award Coordinator, IEEE CS BD Chapter [2018]
- Educational Activity Coordinator, IEEE RAS BD Chapter
- Award Coordinator, IEEE BDS [2017]
- CUET Nominated Member, Establishment of CUET IT Business Incubator, Bangladesh Hi-Tech Park, ICT Division [Acting].
- Sub-project Manager (SPM), Establishment of Fab Lab in CUET, HEQEP, UGC [2016-2018].
- Coordinator, Establishment of Robotics Lab in CUET [Acting].
- Coordinator, Establishment of Mobile Apps, Games and Animation Lab in CUET [Acting].
- Expert Member, Board of Accreditation of Engineering & Technology Education (BAETE), Bangladesh [Acting].
- Selection Committee Member, Dept. of Information & Communication Engineering, Rajshahi University, Rajshahi, Bangladesh.
- Undergraduate Course coordinator, Dept. of CSE, CUET
- Member of Examination/Academic Committee, Dept. of CSE, CUET.
- Member, Planning Committee, Dept. of CSE, CUET

- Member, Academic Committee for Post Graduate Studies and Research, Dept. of CSE, CUET
- Adjunct faculty member, Dept. of Computer Science & Engineering, East Delta University, Chittagong, Bangladesh.
- Adjunct faculty member, Dept. of BBA, Premier University, Chittagong, Bangladesh
- Adjunct faculty member, Dept. of Computer Science & Engineering, Port City International University, Chittagong, Bangladesh.
- Examiner, Dept. of Computer Science & Engineering, Comilla University, Bangladesh
- Examiner, Dept. of Computer Science & Engineering, Chittagong University, Chittagong, Bangladesh
- Examiner, Dept. of Physical & Mathematical Sciences, Chittagong Veterinary and Animal Sciences University, Chittagong, Bangladesh
- Exam Committee Member, Dept. of Information & Communication Engineering, Rajshahi University, Rajshahi, Bangladesh
- Exam Committee Member, Dept. of Information & Communication Engineering, Islamic University, Khustia, Bangladesh
- Exam Committee Member, Dept. of Computer Science & Engineering, Shahjalal University of Science & Technology, Sylhet, Bangladesh
- Examiner, Dept. of Computer Science & Engineering, University of Chittagong, Bangladesh.
- Examiner, Dept. of Computer Science & Engineering, Mawlana Bhashani Science & Technology University, Tangail, Bangladesh.
- Examiner, Dept. of Industrial Production Engineering, Jessor University of Engineering & Technology, Bangladesh.

H. Ph. D Research

Title: An Integrated Approach to Controlling Human Attention through Non-verbal Behaviors of Robots

Supervisor: Prof. Dr. Yoshinori Kuno, Saitama University, Japan

I. M. Sc. Engineering Research

Title: A Parsing Methodology for Bangla Natural Language Processing

Supervisor: Prof. Dr. Muhammad Masroor Ali, Bangladesh University of Engineering & Technology (BUET), Bangladesh.

J. B. Sc. Engineering Research

Title: Design and Implementation of an Uninterrupted Power Supply System **Supervisor:** Zia Uddin Muhammad Kamran, Chittagong University of Engineering & Technology (CUET), Bangladesh.

K. Seminar/Invited Talks

[1] Invited Speech on 'IEEE Member Benefits and Robotics with Machine Learning, organized by Varendra University, Rajshahi, April 2019.

- [2] Invited Speech on 'Machine Learning: Current Trends and Future Prospects' organized by IEEE SB, Islamic University, Khustia, March 2019.
- [3] Invited Speech on 'Workshop on Machine Learning using Phython", organized by IQAC, University of Science & Technology Chittagong (USTC), November 2018.
- [4] Invited Talk on 'Controlling Human Attention in Multiparty Setting', International Workshop on Artificial Intelligence & Its Application, Dhaka University, Dhaka Bangladesh, December 2018.
- [5] Invited Speech on 'An Integrated Approach to Controlling Human Attention through Non-verbal Behaviors of Robots', Bangladesh Army University of Engineering & Technology (BAUET), Natore, Bangladesh
- [6] Invited Speech on 'Recent Trends and Future Challenges in ICT', TechFest-2017 EDU, Chittagong, Bangladesh
- [7] Integrated Approach of Controlling Human Attention by Robot, Islami University, Khustia, Bangladesh
- [8] Research on Bangla Language Processing: Recent Progress and Future Challenges, Presented Seminar on ICT, Organized by Department of CSE, CUET, August 2013.
- [9] An Integrated Approach to Controlling Human Attention through Non-verbal's Behaviors of Robots, Presented Seminar on ICT, Organized by Department of CSE, CUET, November 2012.
- [10] An Empirical Framework to Control Human Attention by Robot, CREST Symposium, November 27, 2010, NII, Tokyo, Japan
- [11] Attracting and Controlling of Human Attention through Robot's Behaviors Suited to the Situations, CREST Symposium, October 19, 2011, NII, Tokyo, Japan
- [12] An Empirical Framework for Parsing of Bangla Sentences" Presented Seminar on ICT, Organized by Department of CSE and CSE Association, CUET, Sept. 2006.
- [13] Cryptography and Bangla: An Experience with RSA Algorithm", Presented Seminar on ICT, Organized by Department of CSE, CUET, May 2007.

L. Training

- [1] Training on Digital Manufacturing, August 15-26, 2018, AKGEC Fablab, India.
- [2] Training on e-gp and e-tender management, IEB, Ranna, Bangladesh, 2018
- [3] Master Training in ITEE, 2015, BCC, ICT Division.
- [4] Advanced PLC with SCADA System and Operator Station, Organized by Training Institute for Chemical Industries, Polash, Narsingdi, Bangladesh, Duration: August, 27, 2006-September, 07, 2006.
- [5] Open Source Software Fundamentals, Organized by CUET, CSDC, & BDOSDN, Bangladesh, Duration: February, 22-23, 2008.

M. Research Area of Interest

- Human-Robot/Computer Interaction
- Computer Vision
- Artificial Intelligence
- Machine learning
- Pattern Recognition

- Bangla Language Processing (Handwritten Recognition, Document Categorization, Emotion Detection, Parsing, Machine Translation, Semantic Analysis, Suspicious Text Detection, Word Sense Disambiguation)
- Ubiquitous Computing
- Medical Informatics
- CSCW
- Internet of Things (IoT)

N. Professional Membership

- Fellow, The Institution of Engineers, Bangladesh (IEB)
- Senior Member, Institute of Electrical & Electronics Engineers (IEEE), USA
- Member, IEEE Computer Society
- Member, IEEE Robotics & Automation Society
- Member, IEEE Signal Processing Society
- Member, IEEE Women in Engineering Society
- Member of Robotics Society of Japan (RSJ)

O. Scholarship, Honors, and Awards

- 1. **Best Paper Award** for Developing a Vision-based Driving Assistance System in International Conference of Emerging Technologies in Data Mining and Information Security (IEMIS), India, 2018.
- 2. **2nd Runner up Award** in Civil Service in Development Innovation 2016 at Solve-a-Thon Category for the Project Design an Empirical Framework to Estimate the Driver's Attention.
- 3. Champion Award in Digital Innovation Fair 2016 both in Division & District Level.
- 4. **Best Paper Award**, An Empirical Robotic Framework for Interacting with Multiple Humans, International Conference on Electrical, Information and Communication Technology (EICT, 2013), Khulna, Bangladesh.
- 5. **Best Paper Presentation Award**, Controlling Human Attention Through Robot's Gaze Behaviors, International Conference on Human System Integration (HSI, 2011), Japan.
- 6. **Monbukagakusho Scholarship**, Ministry of Education, Culture, Sports, Science and Technology, JAPAN, for Doctoral Program at Saitama University, Japan, Oct. 2009 ~ Sept. 2012.
- 7. **Korean Government Scholarship** for IT International Students for PhD Research, Kyung Hee University, South Korea, Aug. 2008~Sept. 2009.
- 8. **President Scholarship** for Supporting Tuition Fees in Kyung Hee University (Aug. 2008~Sept. 2009.
- 9. **Higher Study Scholarship**, Chittagong University of Engineering & Technology, Apr. 2002~Apr. 2004.
- 10. **Technical Scholarship**, Chittagong University of Engineering & Technology, June 1996~Dec. 2000.

P. Research Grant Received

- Receive a grant Taka 600000 (Six Lac) for the project 'Designing an IOT based Smart Medication and Patient Monitoring System' funded by Establishment of CUET IT Business Incubator Project, Bangladesh Hi-tech Park Authority, ICT Division, Bangladesh in fiscal year 2018-2020.
- Receive a grant Taka 600000 (Six Lac) for the project 'Automatic Bengali Document Categorization based on Summarization Techniques' funded by Establishment of CUET IT Business Incubator Project, Bangladesh Hi-tech Park Authority, ICT Division, Bangladesh in fiscal year 2018-2020.
- Received a grant Taka 20890,000 (Two Core Eighty Nine Lac) from World Bank under Higher Education Quality Enhancement Project (HEQUP), UGC for the sub project Establishment of a Fab Lab at Chittagong University of Engineering & Technology, in fiscal year 2017-2018.
- Received a grant Taka 1,78,000 (One Lakh Seventy Eight Thousand) from Chittagong University of Engineering & Technology through Directorate of Research & Extension, for the project Design an Empirical Robotic Framework to Interacting with Humans, in fiscal year 2016-2018
- Received a grant Taka 2,18,000 (Two Lakh Eighteen Thousand) from Chittagong University of Engineering & Technology through Directorate of Research & Extension, for the project Design an Empirical Robotic Framework to Interacting with Humans, in fiscal year 2014-2015.
- Received a grant Taka 10,0000 (Ten Lakh) from Ministry of ICT Division under the project '1000 innovative products by 2021' for the project Design an Empirical Framework to Estimate the Driver's Attention in Real Time, in year 2016-17.
- Awarded a Sub Project, amount Taka 1,60,00000 for the project, "Establishment of a
 Fab Lab at Chittagong University of Engineering & Technology" under the Higher
 Education Quality Enhancement Project (HEQEP) funded by World Bank through
 UGC.

Q. Professional Activities

- TPC Chair, ECCE 2019
- TPC Co-chair, ICISET 2018
- TPC Chair, R10 HTC, 2017
- TPC Member, IC4ME2 2018, RU, Bangladesh
- TPC Member, EICT 2017, KUET, Bangladesh
- Advisory Board Member, ICCIT 2017, UAP, Bangladesh
- Organizing Co-chair, ECCE 2017, Cox's Bazar, Bangladesh
- Member TPC, EICT 2017, Khulna, Bangladesh
- Member TPC, IEEE MediTech 2016, Dhaka, Bangladesh
- PC Member, ICIEV 2016, Dhaka, Bangladesh
- Advisory Committee Member, ICAICT 2016, Chittagong, Bangladesh.
- Track Chair, International Conference On Computer and Information Engineering (ICCIE 2015), Rajshahi, Bangladesh
- Track Co-Chair, IEEE International WIE Conference on Electrical and Computer Engineering (IEEE WICON-ECE 2015), Dhaka, Bangladesh.
- Track Chair, Information and Communication Technology, International Forum on Strategic Technology (IFOST), Technically Co-sponsored by IEEE Bangladesh Section, Cox'sBazar, Bangladesh, 2014.
- Member, Organizing Committee, International Conference on Physics for Sustainable Development and Technology, Chittagong, Bangladesh, 2014.

- Reviewer, IEEE/RSJ IROS 2017, Canada.
- Reviewer, IEEE International Symposium on Robot and Human Interactive Communication (ROMAN), Edinburgh, Scotland, UK, 2014.
- Organizing Secretary, National Conference of Intelligent Computing and Information Technology, Chittagong, Bangladesh 2013.
- Session Chair, 16th International Conference on Computer and Information Technology (ICCIT), Khulna, Bangladesh, 2013.
- Session Chair, International Conference on Electrical, Computer and Telecommunication Engineering (ICECTE), Rajshahi, Bangladesh, 2012.
- Session Chair, International Conference on Electrical, Computer and Telecommunication Engineering, 2017.
- Session Chair, International Conference on Electrical, Computer and Telecommunication Engineering, IEEE International WIE Conference on Electrical and Computer Engineering (IEEE WICON-ECE 2015).
- Session Chair, International Conference on Engineering Research, Innovation and Education (ICERIE-2017).
- Session Chair, IEEE International Conference on Medical Engineering, Health Informatics and Technology (IEEE Meditec-2016).
- Session Chair, ICIEV 2014, 2016.
- Session Chair, International Conference on Imaging, Computer Vision & Pattern recognition (icIVPR-2017).
- IEEE International WIE Conference on Electrical and Computer Engineering (IEEE WICON-ECE 2015.
- Reviewer, ACM/IEEE International Conference on Human Robot Interaction, Boston, USA, 2012.
- Editor-in-Chief, Computer Science and Engineering Research Journal, ISSN: 1990-4010.
- Reviewer, Applied Soft Computing, Elsevier.
- Advisory Board Member, International Journal of Renewable Energy Technology Research (IJRETR).
- Editorial Member, International Journal of Environmental Engineering Science and Technology Research (IJESTR).
- Advisory Board Member, International Journal of Engineering and Technology Research (IJEATR).

R. List of Publications

I. Book Chapters

- [1] L Alam and **M M Hoque**, Vision-based Driver's Attention Monitoring System for Smart Vehicles, Advances Intelligent Systems and Computing, book series (AISC, volume 866) Spinger, pp. 196-209, 2018.
- [2] M. R. Hossain, M M Hoque, Automatic Bengali Document Categorization based on Deep Convolution Nets, Advances in Intelligent Systems and Computing, vol. 882 (In Press).
- [3] A M Shibli, **M M Hoque** and L Alam, Developing a Vision-based Driving Assistance System, Advances in Intelligent Systems and Computing (AISC, volume 755) pp. 799-812.
- [4] **M. M. Hoque**, Q. D. Hossain, and K. Deb, Effects of Robotic Blinking Behavior for Making Eye Contact with Humans, Advanced Computing, Networking and Informatics,

- Volume 1, Smart Innovation, Systems and Technologies, Kundu et al (eds.), vol. 27, pp. 621-627, Springer, 2014.
- [5] **M. M. Hoque**, D. Das, T. Onuki, Y. Kobayashi, and Y. Kuno, Robotic System Controlling Target Human's Attention, Intelligent Computing Theories and Applications, Huang et al (eds.), LNAI, vol. 7390, pp. 534-544, Springer, Heidelberg, Germany, 2012.
- [6] **M. M. Hoque**, T. Onuki, E. Tsuburaya, Y. Kobayashi, Y. Kuno, T. Sato, and S. Kodama, An Empirical Framework to Control Human Attention by Robot. In Computer Vision-ACCV 2010 Workshops, R. Koch and F. Huang (eds.), Part I, vol. 6468, pp. 430-4392. LNCS, Springer, Heidelberg, Germany, 2011.

II. Journal Papers

- [1] L. Alam, and **M M Hoque**, "A Text-Based Chat System Embodied with an Expressive Agent," Advances in Human-Computer Interaction, vol. 2017, Article ID 8962762, 14 pages, 2017. doi:10.1155/2017/8962762.
- [2] M. A.F.M. R. Hasan, R. Yasmin, D. Das, **M. M. Hoque**, M. I. Pramanik, and M. S. Rahman, Fundamental Frequency Extraction of Noisy Speech Signals, Rajshahi University Journal of Science & Engineering, Vol. 43, pp. 51-61, 2015.
- [3] **M. M. Hoque**, Q. D. Hossian, K. Deb, D. Das, Y. Kobayashi, and Y. Kuno, An Empirical Robotic Framework for Initiating Interaction with the Target Human in Multiparty Settings, Journal of Circuits, Systems and Computers, Vol. 24, No. 02, 1540003 (2015) [25 pages] DOI: 10.1142/S0218126615400034.
- [4] M. F. Kader, Assaduzzaman, M. M. Hoque, Outage Capacity Analysis of a Cooperative Relaying Scheme in Interference Limited Cognitive Radio Networks, Wireless Personal Communications, Springer, 2014, doi 10.1007/s11277-014-1976-8.
- [5] **M. M. Hoque**, Y. Kobayashi, and Y. Kuno, A Proactive Approach of Robotic Framework for Making Eye Contact with Humans, Advances in Human-Computer Interaction, vol. 2014, Article ID 694046, 19 pages, 2014. doi:10.1155/2014/694046.
- [6] **M. M. Hoque**, T. Onuki, Y. Kobayashi, and Y. Kuno, Effect of Robot's Gaze Behaviors for Attracting and Controlling Human Attention, Journal of Advanced Robotics, vol. 27, no. 11, pp. 1-17, Taylor & Francis, Japan, July 2013.
- [7] M. F. Kader, Assaduzzaman, M. M. Hoque, Hybrid Spectrum Sharing with Ceoprative Secondary User Selection in Cognitive Radio Networks, KSII Transactions on Internet and Information Systems (TIIS), vol. 07, no. 09, pp. 2081-2100, 2013.
- [8] **M. M. Hoque**, A Robotic Framework for Controlling Human's Attention, Paladyn Journal of Behavioral Robotics (JBR), vol. 03, no. 02, pp. 92-101, Springer, UK, 2012.
- [9] **M. M. Hoque**, Y. Kobayashi, Y. Kuno, and K. Deb, Design a Robotic Head to Attract Human Attention by considering viewing situations, Computer Science and Engineering Research Journal (CSERJ), vol. 08, pp. 29-38, 2012, Bangladesh.
- [10] **M. M. Hoque**, A. M. Mahbub, "An Efficient Framework for Network Intrusion Detection", *Georgian Electronic Scientific Journal: Computer Science and Telecommunications*, Vol. 24, No. 1, pp. 32-42, January, 2010.

- [11] **M. M. Hoque** and M. K. Hassan, "English to Bangla Statistical Machine Translation using A* Search Algorithm", *Georgian Electronic Scientific Journal: Computer Science and Telecommunications*, Vol. 18, No. 1, pp. 65-78, January, 2009.
- [12] **M. M. Hoque** and M. K. Hassan, "An Empirical Framework for Parsing of Bangla Natural Language Sentences", *International Journal of Translation (IJT)*, Vol. 20, No. 1-2, pp. 147-175, July-August, 2008.
- [13] **M. M. Hoque**, M. M. Ahammed and M. M. U. Hasan, An Empirical Framework for Translating of Phrasal Verbs of English Sentence into Bangla, BGC Trust University Journal, vol. 1, pp. 155-167, 2009.
- [14] **M. M. Hoque**, M. S. Arefin and M. S. Kowser, "Context-free Grammars and Parsing for Simple Sentences of Bangla" Computer Science and Engineering Research Journal (CSERJ), Vol. 2, PP. 53-60, ISSN: 1990-4010, 2005.
- [15] M. S. Arefin, **M. M. Hoque**, M. T. Islam and K. Dev, "Structural Operational Semantics of Inheritance and Object creation in JAVA", Computer Science and Engineering Research Journal (CSERJ), vol. 2, pp. 29-35, ISSN: 1990-4010, 2005.
- [16] **M. M. Hoque**, M. S. Arefin and M. O. Rahman, "Semantic Analysis and Transfer: An Experience with the Bangla Natural Language Sentences", Computer Science and Engineering Research Journal (CSERJ), vol. 3, pp. 17-23, ISSN: 1990-4010, 2006.
- [17] A. N. M. R. Karim, M. G. R. Alam and **M. M. Hoque**, "A New Model of Digital Signature Using LSB Hiding, RSA and Merkle-Hellman Cryptosystem" *Computer Science and Engineering Research Journal*, vol. 4, pp. 39-44, 2007.
- [18] M. M. Hoque, M. O. Faruk, M. M. U. Hasan, M. K. Hassan and M. M. U. Karim, "An Empirical Framework for Statistical Parsing of Bangla Sentences", *Computer Science and Engineering Research Journal*, vol. 4, pp. 29-38, 2007.
- [19] M. S. Arefin, R. Paul, M. M. Hoque and M. A. Sarif, "Developing an Intelligent agent to support negotiation in an electronic market place", Computer Science and Engineering Research Journal (CSERJ), Vol. 3, PP. 30-37, ISSN: 1990-4010, 2006.

III. Conference Papers

- [1] L Alam, and M. M. Hoque, Real-Time Distraction Detection Based on Driver's Visual Features, Int. Conf. on Electrical, Computer and Communication Engineering (ECCE 2019), Bangladesh, 2019.
- [2] S Sharmin, and M. M. Hoque, Developing a Bidiretional Mutual Gaze Mechanism for Human Robot Interaction, International Conference on Electrical, Computer and Communication Engineering (ECCE 2019), Bangladesh, 2019.
- [3] S Afroze, and M. M. Hoque, Talking vs Non-Talking: A Vision Based Approach to Detect Human Speaking Mode, Int. Conf. on Electrical, Computer and Communication Engineering (ECCE 2019), Bangladesh, 2019.
- [4] S. Sarker and M M Hoque, An Intelligent System for Conversion of Bangla Sign Language into Speech, Int. Conf. on Innovations in Science, Engineering and Technology (ICISET), Bangladesh, 2018.
- [5] A Khatun, and M M Hoque Probabilistic Approach of Parsing Bengali Sentences, IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering, IEEE, 2018, Thailand.

- [6] L Alam and M M Hoque, Vision-based Driver's Attention Monitoring System for Smart Vehicles, International Conference on Intelligent Computing & Optimization, ICO 2018, Thailand.
- [7] S. Khatun and **M M Hoque**, Semantic Analysis of Bengali Sentences, International Conference on Bangla Speech and Language Processing (ICBSLP), IEEE Xplore, Sylhet, Bangladesh 2018.
- [8] M. R. Hossain, **M M Hoque**, Automatic Bengali Document Categorization based on Deep Convolution Nets, International Conference on Emerging Research in Computing, Information, Communication and Applications, ERCICA 2018.
- [9] A M Shibli, **M M Hoque** and Lamia Alam, Developing a Vision-based Driving Assistance System, International Conference On Emerging Technologies In Data Mining And Information Security (IEMIS 2018), India, 2018 [Best Paper Award].
- [10] Md. Rajib Hossain, and **M M Hoque**, Automatic Bengali Document Categorization Based on Word Embedding and Statistical Learning Approaches, International Conference on Computer, Communication, Chemical, Material and Electronic Engineering (IC4ME2), IEEE Xplore, 2018.
- [11] Saiba Nazah, **M M Hoque** and M R Hossain, Word Sense Disambiguation of Bangla Sentences Using Statistical Approach, International Conference on Electrical Information & Communication Technology (EICT), **DOI:** 10.1109/EICT.2017.8275157, IEEE, Khulna, Bangladesh, 2017.
- [12] Nazmul Hasan, **M M Hoque**, and Md. Rajib Hossain, Automatic Authorship Detection from Bengali Text using Stylometric Approach, International Conference on Computer & Information Technology (ICCIT), **DOI:** 10.1109/ICCITECHN.2017.8281793, IEEE, Dhaka, Bangladesh, 2017.
- [13] YA Rahman, MA Sohan, KI Zinnah, **MM Hoque**, A framework for building a natural language interface for Bangla, International Conf on Electrical, Computer and Communication Engineering (ECCE), 2017.
- [14] A Khatun, **M M Hoque**, Statistical parsing of Bangla sentences by CYK algorithm, International Conf on Electrical, Computer and Communication Engineering (ECCE), 2017.
- [15] A. Kowshal, S. Sharmin and **M. M. Hoque**, "Development of an Interactive Game to Increase Speech Ability for Language Impairment Children", International Conference on Engineering Research, Innovation and Education (ICERIE-2017), SUST, Sylhet, Bangladesh, 2017.
- [16] Mohammad Kamrul Huq Maroof, Lamia Alam and M. M. Hoque, "Transformational Generative Grammar (TGG): An Efficient Way of Parsing Bangla Sentences", International Conference on Electrical, Computer & Telecommunication Engineering (ICECTE), 2016, Rajshahi, Bangladesh.
- [17] P. Chowdhury, L. Alam, and M. M. Hoque, "Designing an Empirical Framework to Estimate the Driver's Attention", In Proc. International Conference Informatics, Electronics & Vision (ICIEV), Dhaka, Bangladesh, 2016.
- [18] S. Rafsan, S. Arefin, A. H. M. M. R. Hasan, and **M. M. Hoque**, "Design a Human-Robot Interaction Framework to Detect Household Objects", In Proc. International International Conference Informatics, Electronics & Vision (ICIEV), Dhaka, Bangladesh, 2016.

- [19] T. Alamgir, M. S. Arefin, and **M. M. Hoque**, "An Empirical Machine Translation Framework for Translating Bangla Imperative, Optative and Exclamatory Sentences into English", In Proc. International Conference Informatics, Electronics & Vision (ICIEV), Dhaka, Bangladesh, 2016.
- [20] A. Haque and **M. M. Hoque**, "Bangla Word Sense Disambiguation System using Dictionary Based Approach", In Proc. Int'l Conference on Advanced Information & Communication Technology (ICAICT), Chittagong, Bangladesh, 2016.
- [21] S. Afroze and **M. M. Hoque**, "Detection of Human's Focus of Attention is using Head Pose", In Proc. In Proc. Int'l Conference on Advanced Information & Communication Technology (ICAICT), Chittagong, Bangladesh, 2016.
- [22] T. Afrin, L. Alam, S. Sharmin and **M. M. Hoque**, "English to Bangla Machine Translation System using Context-Sensitive Grammar", In Proc. Int'l Conference on Advanced Information & Communication Technology (ICAICT), Chittagong, Bangladesh, 2016.
- [23] M. A. F. M. R. Hasan, R. Yasmin, D. Das, **M. M. Hoque**, and M. S. Rahman, "Pitch Detection in Speech Signal under Noisy Conditions", In Proc. International Conference on Materials, Electronics & Information Engineering (ICMEIE), Rajshahi, Bangladesh, 2015.
- [24] L. Alam, and **M. M. Hoque**, "Developing an Expressive Intelligent Agent", In Proc. International Conference on Materials, Electronics & Information Engineering (ICMEIE), Rajshahi, Bangladesh, 2015.
- [25] S. Bhowmick, and **M. M. Hoque**, "Design an Eye-Based Human Computer Interface for Controlling Computer Applications and Electrical Appliances", In Proc. 9th International Forum on Strategic Technology (IFOST), pp. 589-594, Bali, Indonesia, 2015.
- [26] P. Shome, and **M. M. Hoque**, "Speech Based Activity Reminder System for Older People", In Proc. 9th International Forum on Strategic Technology (IFOST), pp. 583-587, Bali, Indonesia, 2015.
- [21] L. Alam, and **M. M. Hoque**, "The Design of Expressive Intelligent Agent For Human-Computer Interaction", In Proc. International Conference on Electrical Engineering and Information Communication Technology (ICEEICT), pp. 1-6, Dhaka, Bangladesh, 2015.
- [22] M. S. Arefin, **M. M. Hoque**, M. O. Rahman, and M. S. Arefin, "A Machine Translation Framework for Translating Bangla Assertive, Interrogative And Imperative Sentences Into English, In Proc. International Conference on Electrical Engineering and Information Communication Technology (ICEEICT), pp. 1-6, Dhaka, Bangladesh, 2015.
- [23] M. H. Ullah, R. H. Samit, and **M. M. Hoque**, "Design a Robotic Head to Interact with Humans using Non-verbal Gaze Following", In Proc. International Conference on Mechanical Engineering and Renewable Energy, pp.67, Chittagong, Bangladesh, 2015.
- [24] M. Manuruzzaman, L. Alam, M. Hoque, and M. S. Arefin, "Design an Expressive Intelligent Agent to Interacting With Humans", In Proc. International Conference on Physics for Sustainable Development and Technology (ICPSDT), Chittagong, Bangladesh, 2015.

- [25] M. S. Arefin, L. Alam. S. Sharmin, and **M. M. Hoque**, "An Empirical Framework for Parsing Bangla Assertive, Interrogative and Imperative Sentences", In Proc. International Conference on Computer and Information Engineering (ICCIE), pp. 122-125, Rajshahi, Bangladesh, 2015.
- [26] S. Haque, M. S. Arefin, **M. M. Hoque**, "BQAS: A Bilingual Question Answering System", In Proc. International Conference on Electrical Information and Communication Technology (EICT), pp. 586-591, Khulna, Bangladesh, 2015.
- [27] M. Rahman, M. Debnath, S. Sharmin, L. Alam, S. Arefin, **M. Hoque**, "Designing an Empirical Framework to Measure the Level of Interest of Human, In Proc. International Conference On Electrical Information And Communication Technology (EICT), pp. 581-585, Khulna, Bangladesh, 2015.
- [28] K. Chowdhury, L. Alam, S. Sarmin, S. Arefin, **M. M. Hoque**, "A Fuzzy Features Based Online Handwritten Bangla Word Recognition Framework", In Proc. International Conference on Computer and Information Technology (ICCIT), pp. , Dhaka, Bangladesh, 2015.
- [29] Y. A. Khan, M. Ahmed, and **M. M. Hoque**, "Isolated Bangla Word Recognition and Speaker Detection by Semantic Modular Time Delay Neural Network (MTDNN)", In Proc. International Conference on Computer and Information Technology (ICCIT), pp., Dhaka, Bangladesh, 2015.
- [30] D. Das, **M. M. Hoque**, J. Ferdousi, M. A. F. M R. Hasan, Automatic Face Parts Extraction and Facial Expression Recognition, International Forum on Strategic Technology (IFOST), pp. 128-131, Cox'sBazar, Bangladesh, 2014.
- [31] Y. A. Rahmann, M. M. Hoque, Helping-Hand: A Data Glove Technology for Rehabilitation of Monoplegia Patients, International Forum on Strategic Technology (IFOST), pp. 199-204, Cox'sBazar, Bangladesh, 2014 (Accepted).
- [32] P. P. Purohit, **M. M. Hoque**, An Empirical Framework for Semantic Analysis of Bangla Sentences, 9th International Forum on Strategic Technology (IFOST), pp. 34-39, Cox'sBazar, Bangladesh, 2014.
- [33] S. Rahman, M. S. Arefin, and **M. M. Hoque**, Developing a Framework for Translation among Different Local Languages of Bangla, In Proc. 9th International Forum on Strategic Technology (IFOST), pp. 30-33, Cox'sBazar, Bangladesh 2014.
- [34] **M. M. Hoque**, Y. Kobayashi, and Y. Kuno, "A Robotic Framework for Shifting the Target Human's Attention in Multi-Party Setting", In Proc. International Conference on Informatics, Electronics, and Vision (ICIEV), Dhaka, Bangladesh, May 2014.
- [35] **M. M. Hoque**, Y. Kobayashi, and Y. Kuno, "A Robotic Framework for Shifting the Target Human's Attention in Multi-Party Setting", In Proc. International Conference on Informatics, Electronics, and Vision (ICIEV), Dhaka, Bangladesh, May 2014.
- [36] **M. M. Hoque**, D. Das, Y. Kobayashi, Y. Kuno, K Deb, Proactive Approach of Making Eye Contact with the Target Human in Multi-Party Settings, International Conference on Computer and Information Technology (ICCIT' 2013), pp. 191-195, Khulna, Bangladesh, March 2014.

- [37] M. M. Hoque, Q. D. Hossian, D. Das, Y. Kobayashi, Y. Kuno, K. Deb, An Empirical Robotic Framework for Interacting with Multiple Humans, International Conference on Electrical Information and Communication Technology (EICT 2013), pp. 422-426, Khulna, Bangladesh, February 2014 [Received Best Paper Award].
- [38] A. H. Sunny, K. Deb, P. Biswas, **M. M. Hoque**, Shadow Detection and Removal Based on YCbCr Color Space, National Conference on Intelligent Computing & Information Technology, pp. 54-59, Chittagong, Bangladesh, October 2013.
- [39] **M. M. Hoque**, K. Deb, D. Das, Y. Kobayashi, Y. Kuno, "An Intelligent Human-Robot Interaction Framework to Control the Human Attention", International Conference on Informatics, Electronics, and Vision (ICIEV), May 2013, Bangladesh.
- [40] D. Das, **M. M. Hoque**, Y. Kobayashi, Y. Kuno, "Attention control system considering the target person's attention level" 111-112", ACM/IEEE International Conference on Human Robot Interaction (HRI), pp. 111-112, 2013, Japan.
- [41] **M. M. Hoque**, D. Das, T. Onuki, Y. Kobayashi, Y. Kuno, "*Model for Controlling a Target Human's Attention in Multi-Party Settings*", The 21st IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), pp. 476-483, 2012, France.
- [42] D. Das, **M. M. Hoque**, T. Onuki, Y. Kobayashi, Y. Kuno, "Vision-based Attention Control System for Socially Interactive Robots", The 21st IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), pp. 96-502, 2012, France.
- [43] **M. M. Hoque**, D. Das, T. Onuki, Y. Kobayashi, Y. Kuno, "An Integrated Approach of Attention Control of Target Human by Nonverbal Behaviors of Robots in Different Viewing Situations", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 1399-1406, 2012, Portugal
- [44] **M. M. Hoque**, T. Onuki, Y. Kobayashi, and Y. Kuno, "Attracting and Controlling Human Attention through Robot's Behaviors Suited to the Situation", International Conference on Human Robot Interaction (HRI'12), pp. 149-150, 2012, USA.
- [45] **M. M. Hoque**, K. Deb, "Robotic System for Making Eye Contact Pro-actively with Humans", 7th International Conference on Electrical and Computer Engineering (ICECE), pp. 125-128, 2012, Bangladesh.
- [46] K.Deb, M.S. Al-Seraj, **M.M. Hoque**, M.I.H. Sarker, "Combined DWT-DCT Based Digital Image Watermarking Technique for Copyright Protection", International Conference on Electrical & Computer Engineering (ICECE), Dhaka, Bangladesh, 2012.
- [47] **M. M. Hoque**, K. Deb, D. Das, Y. Kobayashi, Y. Kuno, "Design An Intelligent Robotic Head to Interacting with Humans", 15th International Conference on Computer and Information Technology (ICCIT), pp. 539-546, 2012, Bangladesh.
- [48] M. M. Hoque, D. Das, Y. Kobayashi, Y. Kuno, K. Deb, "Design an Intelligent Robotic Head for Human Robot Interaction", International Conference on Electrical,

- Computer and Telecommunication Engineering (ICECTE), pp. 565-568, 2012, Bangladesh.
- [49] **M. M. Hoque**, T. Onuki, Y. Kobayashi, Y. Kuno, "Controlling Human Attention by Robot's Behavior Depending on his/her Viewing Situations", International Conference on Social Robotics (ICSR), pp. 37-40, 2011, Netherlands.
- [50] **M. M. Hoque**, T. Onuki, Y. Kobayashi, and Y. Kuno, "*Controlling Human Attention through Robot's Gaze Behaviors*", In Proc. International Conference on Human System Interaction (HSI'11), pp. 195–202, 2011 [Best Presentation Award].
- [51] **M. M. Hoque**, M. R. karim, M. G. Hossian. M. S. Arefin and M. M. U. Hasan, "*Bangla Numeral Recognition Engine (BNRE)*", International Conference on Electrical and Computer Engineering ICECE' 08, PP. 644-647, 2008.
- [52] **M. M. Hoque**, M. M. Ahmed, M. S. Arefin, M. M. U. Hasan and M. G. Hossain, "An Empirical Framework for Translating of Phrasal Verbs of English Sentence into Bangla", International Conference on Information and Communication Technology (ICCIT'2008), PP. 183-188, 2008.
- [53] **M. M. Hoque**, M. A. Muhit, M. A. Ullah. And M. K. Karim, "*Bangla Vowel Sign Recognition by Extracting the Fuzzy Features*", International Conference on Information and Communication Technology (ICCIT'2008), PP. 306-311, 2008.
- [54] A. A. Farook, M. S. Arefin and **M. M. Hoque**, "Structural Operational Semantics of Packages in Java" International Conference on Information and Communication Technology (ICCIT'2008), PP. 40-45, 2008.
- [55] **M. M. Hoque**, M. A. Muhit, M. A. Ullah. And M. K. Karim, "*Network Intrusion Detection System Using Fuzzy Logic*", International Conference on Electronics, Computer and Communication (ICECC), pp. 63, Rajshahi, Bangladesh, 2008.
- [56] S. Khastagir, M. A. Ullah, M. A. S. Shikder and **M. M. Hoque**, "Cognitive Radio in GSM", International Conference on Electronics, Computer and Communication (ICECC), pp. 17, Rajshahi, Bangladesh, 2008.
- [57] M. M. Hoque, M. J. Rahman and P. K. Dhar, "Lexical Semantics: A New Approach to Analyze the Bangla Sentence with Semantic Features", International Conference on Information and Communication Technology ICICT'07, PP. 87-91, March 2007.
- [58] M. A. A. Dewan, M. J. Hossian, M. M. Hoque and O. Chae, "Contaminated ECG Artifact Detection and Elimination from EEG using Energy Function Based Transformation", International Conference on Information and Communication Technology ICICT'07, PP.52-56, March 2007.
- [59] **M. M. Hoque** and M. M. Hasan, "Encryption and Decryption: An Empirical Framework for Bangla With RSA Algorithm", National Conference on Electronics, Information and Telecommunication, PP. 195, Rajshahi, Bangladesh, 2007.

- [60] **M. M. Hoque** and S. M. F. Rahman, "Fuzzy features extraction from Bangla handwritten numerals", International Conference on Information and Communication Technology, ICICT' 07, PP. 72-75, March 2007.
- [61] **M. M. Hoque**, M. K. Hossian, M. M. S. Kowsar, K. Deb and M. S. Arefin, "An Empirical Framework for Network Intrusion Detection using Fuzzy Logic", In Proc. International Conference on Computer and Information Technology, ICCIT'06, PP. 392-397, 2006.
- [62] **M. M. Hoque** and M. O. Karim, "Extraction of meaningful fuzzy features for recognizing of Bangla handwritten numerals" In Proc. International Conference on Computer and Information Technology, ICCIT'06, PP. 61-66, 2006.
- [63] M. M. Hoque, M. M. Haque and P. K. Dhar, "Semantic Analysis of Bangla Sentences: A Compositional Semantic Approach", In Proc. International Conference on Computer Processing of Bangla, ICCPB'06, (Dhaka, Bangladesh), PP. 106-112, 2006.
- [64] **M. M. Hoque**, M. M. Islam and M. M. Ali, "An efficient fuzzy method for Bangla Handwritten numerals recognition" In Proc. International Conference on Electrical and Computer Engineering ICECE' 06, PP. 197-200, 2006.
- [65] M. O. Karim and M. M. Hoque, "Design of a CART Classifier for Bangla Handwritten Character Recognition", In Proc. International Conference on Computer and Information Technology, ICCIT'05, (Gazipur, Bangladesh), PP. 993-997, 2005.
- [66] M. M. Hoque and M. M. Ali, "Semantic Features and Redundancy Rules for Analyzing of Bangla Sentences", In Proc. International Conference on Computer and Information Technology, ICCIT'05, (Gazipur, Bangladesh), PP. 1198-1201, 2005.
- [67] S. M. F. Rahman, M. M. Islam and **M. M. Hoque**, "Extraction of Meaningful Fuzzy Features for Bangla Online Handwriting", In Proc. International Conference on Computer and Information Technology, ICCIT'05, (Gazipur, Bangladesh), PP. 661-666, 2005.
- [68] **M. M. Hoque**, "Biometrics: A Pragmatic Way of Authentication", Souvenir of Seminar on Information and Communication Technology, Organized by CSE, CUET, May 2007.
- [69] T. C. Das and **M. M. Hoque**, "An Evolutionary Power Optimization Technique Using Fuzzy Logic Controller", In Proc. International Conference on Computer and Information Technology, ICCIT'05, (Gazipur, Bangladesh), PP. 919-923, 2005.
- [70] M. M. Islam, S. M. F. Rahman and M. M. Hoque, "Online Bengali Handwriting Recognition with Automatically Generated Fuzzy Linguistic Rules", In Proc. International Conference on Computer and Information Technology, ICCIT'05, (Gazipur, Bangladesh), PP. 673-678, 2005.
- [71] M. M. Hoque and M. M. Ali, "Context-sensitive Phrase Structure rules for Structural Representation of Bangla Natural Language Sentences", In Proc.

- International Conference on Computer and Information Technology, ICCIT'04, (Dhaka, Bangladesh), PP. 615-620, 2004.
- [72] **M. M. Hoque** and M. M. Ali, "A Parsing Methodology for Bangla Natural Language Sentences", In Proc. International Conference on Computer and Information Technology, ICCIT'03, (Dhaka, Bangladesh), PP. 277-282, 2003.