

Curriculum Vitae

Md. Anwar Hossain

Associate Professor

Department of Information and Communication Engineering (ICE)

Faculty of Engineering and Technology

Pabna University of Science and Technology (PUST)

Pabna, BANGLADESH

Mobile: +88 01717 330923

Email: manwar.ice@pust.ac.bd



1. Research Interest

- » Machine Learning
- » Deep Learning
- » Image Processing and Analysis
- » Artificial Intelligence and Robotics

2. Education

- M.Phil. 2020
 - » **Master of Philosophy** from the Dept. of Information and Communication Engineering (ICE), Pabna University of Science and Technology (PUST), Bangladesh
 - » Research Title: “Activity Identification from Natural Images using Deep CNN and RNN”
- M.Sc. 2006
 - » **Master of Science** from the Dept. of Information and Communication Engineering (ICE), University of Rajshahi, Bangladesh
 - » Medium of Instruction: English
 - » Master’s Thesis: “Performance Evaluation of MPEG-4 Video Transmission over IP Networks”
 - » Result: **GPA 3.95 out of 4.00**
- Thesis Group
(Held in 2008)
- B.Sc. 2005
 - » **Bachelor of Science (Hon’s)** from the Dept. of Information and Communication Engineering (ICE), University of Rajshahi, Bangladesh
 - » B.Sc. Project: “Simulation-Based Performance Analysis of TCP Tahoe, Reno, New Reno, Sack, and Vegas”
 - » Medium of Instruction: English
 - » Result: **CGPA 3.60 out of 4.00**
- (4 Year Honors)
(Held in 2007)
- H.S.C. 2000
 - » Higher Secondary School Certificate from Shahid Bulbul Govt. College, Pabna.
 - » Group: Science
 - » Board: Rajshahi
 - » Result: **First Division with 68.9% marks.**

0975-4172 & ISSN (Print): 0975-4350.

- 2014 [8] Md. Shahadat Hossain, Md. Samiul Islam, AFM Zainul Abadin, **Md. Anwar Hossain**, "Methodology to Achieve Enhanced Data Transmission Rate using Li-Fi in VLC Technology" International Journal of Engineering Research, Volume No.3, Issue No.12, pp. 803-806, 01 Dec. 2014, ISSN:2319-6890(online),2347-5013(print).
- 2015 [9] **Md. Anwar Hossain**, AFM Zainul Abadin, "Downlink Scheduling in Long Term Evolution", International Journal of Engineering Research, Volume 4, Issue 6, pp.: 277-281, 01 June 2015, ISSN: 2319-6890 (online), 2347-5013 (print).
- 2018 [10] Tarun Debnath, AFM Zainul Abadin, **Md. Anwar Hossain**. "Android Controlled Smart Wheelchair for Disabilities", Global Journal of Computer Science and Technology Network, Interdisciplinary, Volume 18(1), Year 11.04.2018, pp. 9-12; ISSN (Online): 0975-4172 & ISSN (Print): 0975-4350. DOI: <http://doi.org/10.34257/GJCSTGVOL18IS1PG1>
- 2018 [11] Tarun Debnath, AFM Zainul Abadin, Md. **Anwar Hossain**. "PWM based Android Controlled Smart Wheelchair", International Journal of Computer Science & Information Technology (IJCSIT), Vol. 10(2), April 2018 pp. 57-64; ISSN (Online): 0975-3826 & ISSN (Print): 0975-4660. DOI: <http://doi.org/10.5121/ijcsit.2018.10205>
- 2019 [12] **Md. Anwar Hossain**, Mst. Sharmin Akter. "Study and Optimized Simulation of OSPFv3 Routing Protocol in IPv6 Network", Global Journal of Computer Science and Technology Network, Web & Security, Volume 19(2), Year 23.03.2019; pp: 11-16; ISSN: 0975-4172 (Online), 0975-4350 (Print). DOI: <http://doi.org/10.34257/GJCSTEVOL19IS2PG11>
- 2019 [13] **Md. Anwar Hossain**, Md. Shahriar Alam Sajib. "Classification of Image using Convolutional Neural Network (CNN)", Global Journal of Computer Science and Technology, Neural & AI, Volume 19(2), Year 18.05.2019, pp. 13-18; ISSN: 0975-4172 (Online), 0975-4350 (Print). DOI: <http://doi.org/10.34257/GJCSTDVOL19IS2PG13>
- 2019 [14] **Md. Anwar Hossain**, Md. Mohon Ali. "Recognition of Handwritten Digit using Convolutional Neural Network (CNN)", Global Journal of Computer Science and Technology, Neural & AI, Volume 19(2), Year 18.05.2019; pp. 27-33; ISSN: 0975-4172 (Online), 0975-4350 (Print). DOI: <http://doi.org/10.34257/GJCSTDVOL19IS2PG27>
- 2019 [15] **Md. Anwar Hossain**, Sadia Afrin "Optical Character Recognition based on Template Matching", Global Journal of Computer Science and Technology, Software & Data Engineering, Volume 19(2), Year 21.05.2019; pp. 31-35; ISSN: 0975-4172 (Online), 0975-4350 (Print). DOI: <http://doi.org/10.34257/GJCSTCVOL19IS2PG31>
- 2019 [16] Md. Manik Ahmed, **Md. Anwar Hossain**, AFM Zainul Abadin. "Implementation and Performance Analysis of Different Hand Gesture Recognition Methods", Global Journal of Computer Science and Technology,

Neural & AI, Volume 19(3), Year 17.07.2019, p. 13-20, ISSN: 0975-4172 (Online), 0975-4350 (Print).

DOI: <http://doi.org/10.34257/GJCSTDVOL19IS3PG13>

- 2019 [17] Moshammad Sharmin Akter, **Md. Anwar Hossain**. "Analysis and Comparative Study for Developing Computer Network in Terms of Routing Protocols Having IPv6 Network Using Cisco Packet Tracer", Software Engineering. Vol. 7(2), 2019, pp. 16-29. ISSN: 2376-8029 (Print), 2376-8037 (Online). DOI: <http://doi.org/10.11648/j.se.20190702.11>
- 2019 [18] **Md. Anwar Hossain**, Mahabuba Zannat. "Simulation and Design of University Area Network Scenario (UANS) using Cisco Packet Tracer", Global Journal of Computer Science and Technology, Interdisciplinary, Volume 19(3), Year 07.08.2019, pp. 7-11, ISSN (Online): 0975-4172 & ISSN (Print): 0975-4350. DOI: <http://doi.org/10.34257/GJCSTGVOL19IS3PG7>
- 2019 [19] Md. Manik Ahmed, **Md. Anwar Hossain**, AFM Zainul Abadin. "Implementation of Back Propagation Neural Network with PCA for Face Recognition", Global Journal of Computer Science and Technology, Interdisciplinary, Volume 19(3), Year 07.08.2019, pp. 21-26, ISSN: 0975-4172 (Online), 0975-4350 (Print). DOI: <http://doi.org/10.34257/GJCSTGVOL19IS3PG21>
- 2020 [20] **Md. Anwar Hossain**, Md. Mohon Ali, Mst. Sharmin Akter, Md. Shahriar Alam Sajib. "Performance Comparison of EIGRP, OSPF and RIP Routing Protocols using Cisco Packet Tracer and OPNET Simulator", Global Journal of Computer Science and Technology, Interdisciplinary, Volume 20(2), Year 30.03.2020; pp. 1-7; ISSN: 0975-4172 (Online), 0975-4350 (Print). DOI: <http://doi.org/10.34257/GJCSTGVOL20IS2PG1>
- 2021 [21] **Md. Anwar Hossain**, AFM Zainul Abadin, Md. Manik Ahmed. "Brain Tumor Location Identification and Patient Observation from MRI Images", Journal of Image Processing and Artificial Intelligence, Volume 7(1), Year 2021, pp. 7-20, ISSN: 2581-3803 (Online).
- 2021 [22] Ali MH, Hosain MS, and Hossain MA. (2021). Big data analysis using bigquery on cloud computing platform, Aust. J. Eng. Innov. Technol., 3(1), 1-9. <https://doi.org/10.34104/ajeit.021.0109>

4. Conference Proceedings

- 2007 [1] **Md. Anwar Hossain, Md. Azizur Rahman**, "Simulation-Based Performance Analysis of TCP Tahoe, Reno, New Reno, Sack and Vegas using NS-2", National Conference on Electronics, Information and Telecommunication, 29-30 June 2007, Organized by Bangladesh Electronics Society (BES).

5. Published Book

- 2015 [1] **Md. Anwar Hossain**, "Information and Communication Technology", Bornomala Prokashoni, 01 June 2015, ISBN: 978-984-90216-1-2.

6. Awards and Achievements

- 2005 [1] Received Merit Scholarship for outstanding results in the B.Sc. (Honors) Examination-2005 from the University of Rajshahi, Bangladesh.
- 2005 [2] Received Hossain Shaheed Suhrawardy Hall Gold Medal for Outstanding result in B.Sc. (Honors) Examination-2005 from the University of Rajshahi, Bangladesh.

7. Conferences Attended

- 2007 [1] Attended in “National Conference on Electronics, Information and Telecommunication”, 29-30 June 2007, Organized by Bangladesh Electronics Society (BES).
- 2008 [2] Attended in “International Conference on Electronics, Computer and Communication (ICECC-2008)”, Organized by University of Rajshahi, Bangladesh.

8. Training, Workshops, and Seminars

- 2009 [1] Participated in the training program for Training of Trainers (TOT) on “Adult Learning (Andragogy), Managing Difficult Students, Active Learning and Web Strategies”, Organized by Support for Development of Public Sector Use of ICT under EMTAP, BCC, Ministry of Science and ICT.
- 2009 [2] Participated in the short training course on “Office Management”, 17-19 Aug 2009, Organized by Bangladesh Computer Council (BCC), Dhaka, Bangladesh.
- 2017 [3] Participated in the “Workshop on 3D Printing Technology”, 5th Oct 2017, Organized by Department of Information and Communication Engineering, University of Rajshahi.
- 2017 [4] Participated in the Seminar on “Development of Intelligent Systems and Transformation of Thoughts into Research and Innovation”, 30-31 Dec 2017, Organized by IICT, BUET.
- 2017 [5] Participated in the “Workshop on Integrated Library System: Koha and MARC 21”, 6-9 Jan 2017, Organized by East West University Library, Dhaka Bangladesh.
- 2017 [6] Participated in the “Campus Network Project Kick-off Workshop”, 18th Sep 2017, Organized by University Grants Commission and HEQEP, Bangladesh.
- 2017 [7] Participates in the International Seminar “Strategies for Sustainable R&E Networks”, 30-31 Oct 2017, Organized by University Grants Commission and HEQEP, Bangladesh.
- 2018 [8] Participated in the “Workshop-3 on Post Self Assessment (SA) Improved Plan”, 15th May 2018, Organized by ICE department, University of Rajshahi, Bangladesh.

9. Undergraduate Thesis and Project Supervision

- 2016 [1] B.Sc. (Engg.) Thesis: "Network Design for a Corporate Office", Md. Khairul Islam, Roll: 110601, Year 2016.
- 2016 [2] B.Sc. (Engg.) Thesis: "A Comprehensive Study of Diagnosis Breast Cancer using Artificial Neural Network", Farhana Akter Ena, Roll: 110612, Year 2016.
- 2016 [3] B.Sc. (Engg.) Thesis: "Paradigm Shift Towards Cloud Computing on Big Data", Md. Samiul Islam, Roll: 110624, Year 2016.
- 2016 [4] B.Sc. (Engg.) Thesis: "Performance Analysis of Campus Area Network", Md. Momenul Islam, Roll: 110627, Year 2016.
- 2016 [5] B.Sc. (Engg.) Thesis: "Network Design for a Company with Remote Branch Offices", Md. Zahidul Islam, Roll: 110632, Year 2016.
- 2017 [6] B.Sc. (Engg.) Thesis: "Performance Analysis of RIP, OSPF and EIGRP Routing protocol Using Packet Tracer and OPNET Simulator", Monayem Hossain, Roll: 120609, Year 2017.
- 2017 [7] B.Sc. (Engg.) Thesis: "Performance Analysis of IPsec, PPTP, OpenVPN, Protocols on Virtual Private Network", Abdullah Al Noman, Roll: 120617, Year 2017.
- 2017 [8] B.Sc. (Engg.) Thesis: "Security System of Banking Computer Network using Cisco Devices", Md. Jahid Hossen, Roll: 120620, Year 2017.
- 2017 [9] B.Sc. (Engg.) Thesis: "A Study on Cloud Computing Technology and Its progress in Bangladesh", Md. Biddut Sarkar, Roll: 120631, Year 2017.
- 2017 [10] B.Sc. (Engg.) Project: "ICE Programming Blog Site", Md. Anwarul Islam, Roll: 120641, Year 2017.
- 2018 [11] B.Sc. (Engg.) Thesis: "Comparisons Among different Interior Gateway Routing Protocols (RIPng, EIGRPv6, OSPFv3, IS-IS)", Md. Munnaf Hossen, Roll: 130614, Year 2018.
- 2018 [12] B.Sc. (Engg.) Thesis: "Implementation of OSPFv3 Routing Protocol in IPv6 Network Using Cisco Packet Tracer", Mst. Momotaj Islam, Roll: 130623, Year 2018.
- 2018 [13] B.Sc. (Engg.) Project: "Android Game: Ready to Go", Dipak Kumar Ghosh, Roll: 130630, Year 2018.
- 2018 [14] B.Sc. (Engg.) Thesis: "Implementation and Simulation of Entity Authentication in 5g Wireless Communication", Mst. Farzana Akter, Roll: 130637, Year 2018.
- 2018 [15] B.Sc. (Engg.) Thesis: "Design and simulation of a Computer Network using RIP and OSPF Routing Protocol", Md. Shaiful Islam, Roll: 130643, Year 2018.
- 2019 [16] B.Sc. (Engg.) Thesis: "Study and Optimized Simulation of OSPFv3 Routing Protocol in IPv6 Network", Mst. Sharmin Akter, Roll: 140639, Year 2019.
- 2019 [17] B.Sc. (Engg.) Thesis: "Recognition of Handwritten Digit using Convolutional Neural Network (CNN)", Md. Mohon Ali, Roll: 130622, Year 2019.
- 2019 [18] B.Sc. (Engg.) Thesis: "Simulation and Design of University Area Network Scenario (UANS) Using Cisco Packet Tracer", Mahbuba Zannat, Roll: 140627, Year 2019.

- 2019 [19] B.Sc. (Engg.) Thesis: "Classification of Image using Convolutional Neural Network (CNN)", Md. Shahriar Alom Sajib, Roll: 130639, Year 2019.
- 2019 [20] B.Sc. (Engg.) Thesis: "Optical Character Recognition based on Template Matching", Sadia Afrin, Roll: 140622, Year 2019.
- 2020 [21] B.Sc. (Engg.) Project: "Android Application on Age, Electricity Bill, Distance and Area Measurement", Md. Shahadat Hossain Shiam, Roll: 150605, Year 2020.
- 2020 [22] B.Sc. (Engg.) Project: "Online Admission Application System", Bilkis Ahmed, Roll: 150625, Year 2020.
- 2020 [23] B.Sc. (Engg.) Project: "Online based Result Management System", M. M. Hussain, Roll: 150636, Year 2020.
- 2020 [24] B.Sc. (Engg.) Thesis: "Study on Cyber Crime and Cyber Security in Bangladesh Perspective", Ishrat Zahan Raka, Roll: 150639, Year 2020.

10. Graduate Thesis Supervision

- 2019 [1] M.Sc. (Engg.) Thesis: "Implementation and Performance Analysis of Different Hand Gesture Recognition Methods", Md. Manik Ahmed, Roll: 17010613, Year 2019.
- 2019 [2] M.Sc. (Engg.) Thesis: "Handwritten Bangla Numerical Digit Recognition Using Fine Regulated Deep Neural Network", Md. Shahadat Hossain, Roll: 17010601, Year 2019.

11. Professional Experiences

- | | |
|--|---|
| 22.12.2020
To
Present | [1] Associate Professor
Department of Information and Communication Engineering (ICE)
Faculty of Engineering and Technology
Pabna University of Science and Technology (PUST)
Pabna, BANGLADESH. |
| 28.09.2013
To
21.12.2020
(8 Years 2 Months 23 Days) | [2] Assistant Professor
Department of Information and Communication Engineering (ICE)
Faculty of Engineering and Technology
Pabna University of Science and Technology (PUST)
Pabna, BANGLADESH. |
| 16.01.2012
To
28.09.2013
(1 Year 8 Months 12 Days) | [3] Lecturer
Department of Information and Communication Engineering (ICE)
Faculty of Engineering and Technology
Pabna University of Science and Technology (PUST)
Pabna, BANGLADESH. |
| 05.08.2010
To
15.01.2012
(1 Year 5 Months 10 Days) | [4] Lecturer
Department of Information and Communication Technology (ICT)
Faculty of Science
Comilla University, Comilla, BANGLADESH. |
| 17.07.2008 | [5] Assistant Programmer
Bangladesh Computer Council |

To Ministry of Posts, Telecommunications and Information
 01.08.2010 Technology, Government of Bangladesh (GOB).
 (2 Years 15 Days)

12. Administrative and Other Experiences

- 01.04.2017 [1] **Director,**
 To Information and Communication Technology Cell (ICT Cell)
 Present Pabna University of Science and Technology (PUST)
 Pabna-6600, BANGLADESH.
- 28.09.2013 [2] **Chairman,**
 To Department of Information and Communication Engineering (ICE)
 27.09.2016 Faculty of Engineering and Technology
 (3 Years) Pabna University of Science and Technology (PUST)
 Pabna-6600, BANGLADESH.
- 09.12.2014 [3] **Deputy Sub-Project Manager (DSPM),**
 To Establishment of Campus Area Network (CAN) at PUST
 Present Pabna University of Science and Technology
 Pabna-6600, BANGLADESH.
- 2017-2018 [4] **Coordinator, MICT Evening Program**
 Department of Information and Communication Engineering (ICE)
 Pabna University of Science and Technology (PUST)
 Pabna-6600, BANGLADESH.
- 2013-2014 [5] **Joint Secretary, Teachers Association**
 Pabna University of Science and Technology (PUST)
 Pabna-6600, BANGLADESH.

13. Conducted Courses

Sl.	Course No.	Title of The Courses Taught	Level	No. of Students (Approx.)	(Lectures/Week) or (H/W)	Year
1.	ICE-1103	Information Technology and Computer Fundamental	BSc(Engg.)	40	3	2012, 2014
2.	ICE-1104	Information Technology and Computer Fundamental Sessional	BSc(Engg.)			2014
3.	ICE-1105	Engineering Graphics	BSc(Engg.)	40	3	2012, 2013,
4.	ICE-1103	Fundamentals of ICT	BSc(Engg.)	40	3	2015, 2016, 2017, 2018
5.	ICE-1104	Fundamentals of ICT Sessional	BSc(Engg.)	40	3	2015, 2016, 2017, 2018
6.	ICE-1203	Programming with C	BSc(Engg.)	40	3	2012, 2013, 2015, 2016
7.	ICE-1204	Programming with C Sessional	BSc(Engg.)	40	3	2012, 2013, 2015, 2016

Sl.	Course No.	Title of The Courses Taught	Level	No. of Students (Approx.)	(Lectures/Week) or (H/W)	Year
8.	ICE-2101	Discrete Mathematics and Numerical Methods	BSc(Engg.)	40	3	2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
9.	ICE-2102	Discrete Mathematics and Numerical Methods Sessional	BSc(Engg.)	40	3	2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
10.	ICE-2104	Analog Electronics-II	BSc(Engg.)	40	3	2012,
11.	ICE-2201	Data Structure and Algorithm	BSc(Engg.)	40	3	2012, 2013, 2016, 2017, 2018, 2019
12.	ICE-2202	Data Structure and Algorithm Sessional	BSc(Engg.)	40	3	2012, 2013, 2016, 2017, 2018, 2019
13.	ICE-3105	Network Programming with Java	BSc(Engg.)	40	3	2013
14.	ICE-3106	Network Programming with Java Sessional	BSc(Engg.)	40	3	2013
15.	ICE-3202	DBMS, Data Warehousing and Data Mining	BSc(Engg.)	40	3	2013
16.	ICE-3202	Database Management System	BSc(Engg.)	40	3	2017
17.	ICE-3203	Database Management System Sessional	BSc(Engg.)	40	3	2017
18.	ICE-3207	Digital Image and Speech Processing	BSc(Engg.)	40	3	2018, 2019
19.	ICE-3208	Digital Image and Speech Processing Sessional	BSc(Engg.)	40	3	2018, 2019
20.	ICE-4102	Computer Network and Data Communication	BSc(Engg.)	40	3	2014, 2015, 2016, 2017
21.	ICE-4103	Computer Network and Data Communication Sessional	BSc(Engg.)	40	3	2014, 2015, 2016, 2017
22.	ICE-4113	Management Information System	BSc(Engg.)	40	3	2019
23.	ICE-4202	Information System Analysis and Software Engineering	BSc(Engg.)	40	3	2014, 2015, 2016
24.	ICE-4203	Information System Analysis and Software Engineering Sessional	BSc(Engg.)	40	3	2014, 2015, 2016
25.	ICE-4208	Digital Signal Processing	BSc(Engg.)	40	3	2017
26.	ICE-4209	Digital Signal Processing Sessional	BSc(Engg.)	40	3	2017
27.	ICE-6111	ICT Enabled Research Methodology	MSc(Engg.)	13	3	2017
28.	ICE-6206	Applied Cryptography	MSc(Engg.)	13	3	2017, 2018

14. Programming Skills

- Programming Languages » Python, MATLAB, C, C++, Prolog, Pascal, HTML, JavaScript, PHP, Visual Basic, Network Simulator-2, TCL, PERL, Assembly language.
- Operating System » MS-DOS, Windows Family, Linux
- DBMS » MySQL, SQL Server, Oracle, MS Access
- Networking » DNS Server, Web Server, FTP Server
- Application Tools » MS Word, Excel, Powerpoint, Adobe Photoshop, etc.

15. Languages Proficiency

- Bangla » Native Language
- English » Have a good command in speaking, listening, reading and writing. English was the instruction medium of B.Sc. (Hon's) & M.Sc. program.

16. References

- » **Professor Dr. Mirza AFM Rashidul Hasan**
Department of Information and Communication Engineering
University of Rajshahi,
Rajshahi-6205, Bangladesh
Mobile: +88 01715 249842
Email: mirzahasanice@gmail.com
- » **Professor Md. Saiful Islam**
Department of Electrical, Electronics and Communication Engineering
Pabna University of Science and Technology,
Pabna-6600, Bangladesh
Mobile: +88 01710 459092
Email: msislam0701@gmail.com

I hereby certify that the above information is true and correct to the best of my knowledge and belief.

(Md. Anwar Hossain)