

UMMA HANY

Address: House No. 20, Road No. 18, Sector-11, Uttara, Dhaka-1230

Mobile : +8801712002418

e-mail : ummahany@baiust.edu.bd; ummahany@gmail.com.



Current Status:

Assistant Professor and Head

Department of Electrical and Electronic Engineering,
Bangladesh Army International University of Science and Technology (BAIUST).
Comilla Cantonment, Comilla.

Education:

1. ***Doctor of Philosophy (PhD) in Electrical and Electronic Engineering, 2017***
Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
2. ***Master of Science (MSc.) in Electrical and Electronic Engineering, 2009***
Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
3. ***Bachelor of Science (BSc.) in Electrical and Electronic Engineering, 2004***
Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh.
4. ***Higher Secondary Certificate, 1999***
Motijheel Ideal School and College, Dhaka.
5. ***Secondary School Certificate, 1997***
Motijheel Govt. Girls' High School, Dhaka.

Career Summary:

1. Assistant Professor and Head, Department of EEE, Bangladesh Army International University of Science and Technology (BAIUST).
2. Assistant Professor, Department of EEE, University of Asia Pacific (UAP), Bangladesh.
3. Lecturer, Department of EEE, University of Asia Pacific (UAP), Bangladesh.
4. Senior Engineer and Team Leader, Core Network Engg., Huawei Technologies BD Ltd.
5. Trainer, Core Network Engg., Huawei Technologies BD Training Center.
6. Hardware Engineer, Prepaid Energy Meter project, Institute of Information and Communication Technology (IICT), Bangladesh University of Engineering and Technology (BUET).

Research Interests:

Communication and Network, Localization, Image Processing, Embedded system.

Thesis and Projects:

1. **PhD Thesis:** Weighted Centroid based Localization for Wireless Video Capsule Endoscope.
Supervisor: Dr. Lutfa Akter, Associate Professor, EEE, BUET.
2. **Canadian Commonwealth Scholarship Program:** RF Localization algorithm for Wireless Video Endoscopic Capsule using Linear least square-weighted centroid, University of Saskatchewan, Canada.
Supervisor: Dr. Khan A. Wahid, Associate Professor, University of Saskatchewan, Canada.
3. **Masters Thesis:**QoS and performance analysis of voice over All-IP Next Generation Network BUET.
Supervisor: Dr. P. K. Saha, Professor, BUET.
Co-Supervisor: Dr. A. B. M. Siddique Hossain, Professor and Dean, AIUB.
4. **Undergraduate Thesis:** Design and Development of an Electronic Entry-Security System for an Establishment, AUST.
Supervisor: Dr. S.M. Lutful Kabir, Professor, BUET.

Publications:

Journals

1. **Umma Hany** and Lutfa Akter, "Non-parametric Approach using ML Estimated Path Loss Bounded WCL for Video Capsule Endoscope Localization", 2018 – **Under Review**
2. **Umma Hany**, and Lutfa Akter, "Non-parametric Method of Path Loss Estimation for Endoscopic Capsule Localization.", *International Journal of Wireless Information Networks, Springer*, pp.1-13, 2017.
3. **Umma Hany** and Lutfa Akter, "Local Parametric Approach of Wireless Capsule Endoscope Localization Using Randomly Scattered Path Loss Based WCL.", *Wireless Communications and Mobile Computing, Hindawi*, vol. 2017, 2017.
4. **Umma Hany**, and Lutfa Akter, "Non-parametric approach of video capsule endoscope localization using suboptimal method of position bounded CWCL," *IEEE Sensors Journal*, vol. 17, no. 20, 2017.
5. **Umma Hany**, Lutfa Akter, and Mohammad Forhad Hossain, "Degree-based WCL for video endoscopic capsule localization," *IEEE Sensors Journal*, vol. 17, no. 9, 2017.
6. **Umma Hany**, and Khan A. Wahid. "An Adaptive Linearized Method for Localizing Video Endoscopic Capsule Using Weighted Centroid Algorithm." *Hindawi International Journal of Distributed Sensor Networks*, vol. 2015, p. 5, 2015.

7. **Umma Hany**, Forhad Ebn Anwar, Nadia Mahjabin, Sheesh Islam, and Farzana Alam, "Design and Development of a Litho-code ID based electronic entry-control system.", *IAES International Journal of Electrical and Computer Engineering*, vol. 2, Issue. 4, pp. 537-546, 2012.
8. **Umma Hany**, and A. B. M. Siddique Hossain, "Prospects of IP-based Next Generation Network in Bangladesh", *AIUB Journal of Science and Engineering*, vol. 11, No. 1, 2012.

Conferences

1. **Umma Hany** and Lutfu Akter, "Local polynomial regression based path loss estimation for weighted centroid localization of endoscopic capsule," *IEEE International Conference on Control, Electronics, Renewable Energy and Communications*, Yogyakarta, Indonesia, 2017.
2. **Umma Hany** and Lutfu Akter, "Performance of distance based and path loss based weighted centroid localization algorithms for video capsule endoscope," *IEEE International Conference on Signal and Image Processing Applications*, Kuching, Malaysia, 2017.
3. **Umma Hany** and Lutfu Akter, "Accuracy of endoscopic capsule localization using position bounds on smoothed path loss based WCL," *IEEE International Conference on Signal and Image Processing Applications*, Kuching, Malaysia, 2017.
4. **Umma Hany**, Md. Farhad Hossain and Lutfu Akter, "Moving Averaging Method of RSSI Based Distance Estimation for Wireless Capsule Localization", *IEEE International Conference on Medical Engineering, Health Informatics and Technology (MediTec)*, pp. 1-5, 2016, Bangladesh.
5. **Umma Hany**, and Lutfu Akter, "Speeded-Up Robust Feature Extraction and Matching for Fingerprint Recognition", *IEEE International Conference on Electrical Engineering and Information Communication Technology (ICEEICT)*, 2015.
6. **Umma Hany**, and Lutfu Akter. "Wireless sensor network for information based domestic power management." *IEEE International Conference on Computer and Information Technology (ICCIT)*, 2014.
7. **Umma Hany**, and Pran Kanai Saha. "QoS optimization and performance analysis of NGN." *IEEE International Conference on Electrical and Computer Engineering (ICECE)*, 2010.

Others:

Six technical cases and paper published in the *Huawei Documentation Column*.

Honors and Awards:

Certification	Institute
Canadian Commonwealth Scholarship	University of Saskatchewan, Saskatoon, Canada
Excellent Technical Case Award	Huawei Technologies Co. Ltd, Global Technical Service HR dept, Huawei Technologies Co. Ltd.
Excellent Performance Certificate	Huawei Technologies Co. Ltd, Bangladesh.

Professional History:

1. **Assistant Professor and Head (Feb 01, 2015–Till date)**

Dept. of Electrical and Electronic Engineering,

Bangladesh Army International University of Science and Technology (BAIUST).

Comilla Cantonment, Comilla.

Duties/Responsibilities:

Teaching, research, Curriculum formulaton and revision, Lab development and other routine task.

2. **Assistant Professor (April 24, 2011 - Sep 04,2014)**

Dept. of Electrical and Electronic Engineering,

University of Asia Pacific (UAP)

3. **Lecturer (April 15, 2010 - April 23, 2011)**

Dept. of Electrical and Electronic Engineering,

University of Asia Pacific (UAP)

Dhanmondi, Dhaka, Bangladesh.

Duties/Responsibilities:

Teaching, research, undergrad thesis supervision and routine task.

4. **Senior Engineer & Team Leader, Core Network (October 01, 2007 - June 29, 2009)**

Technical Service Department

Huawei Technologies(Bangladesh) Co. Ltd.

Gulshan, Dhaka, Bangladesh.

Duties/Responsibilities:

Leading the Professional O&M Service Team and the Engineering service team (NGN, CC08 Switch and MSC product line).

5. **Engineer, Core Network (September 30, 2005 - September 30, 2007)**

Technical Service Department

Huawei Technologies(Bangladesh) Co. Ltd.

Gulshan, Dhaka, Bangladesh.

Duties/Responsibilities:

Supervise site survey and hardware installation, software configuration and commissioning, integration with related network elements of fixed and mobile core network products (CC08, NGN and G9 MSC), engineering problemstroubleshooting.

6. **Trainer/Instructor, Core Network**

Huawei Bangladesh Training Centre

Huawei Technologies(Bangladesh) Co. Ltd.

Gulshan, Dhaka, Bangladesh.

Duties/Responsibilities:

Conduct training on NGN and CC08 products.

7. **Hardware Engineer (October 16, 2004 - July 31, 2005)**

Institute of Information and Communication Technology (IICT)

Bangladesh University of Engineering and Technology

Polasi, Dhaka, Bangladesh.

Duties/Responsibilities:

Design and development of the test benches of prepaid energy meter.

Training Summary:

Training Title	Topic	Institute	Location	Year	Duration
Core Network (CC08) Engineering Training	CC08 switch	Huawei Training Center (Asia Pacific)	Kualalumpur, Malaysia	2006	1 month
Core Network (NGN) Engineering Training	NGN	Huawei Training Center (Asia Pacific)	Kualalumpur, Malaysia	2006	1 month
iManager N2000 UMS Training	iManager N2000 UMS	Huawei Bangladesh Training Centre	Dhaka, Bangladesh	2009	2 days
G9 MSC Product Training	MsoftX3000 and UMG8900	Huawei Bangladesh Training Centre	Dhaka, Bangladesh	2007	12 days

Significant Responsibilities:

1. Reviewer, IEEE Sensors letter Journal.
2. Head, Dept of EEE, BAIUST.
3. Member (as the Head, EEE), Academic Council, BAIUST.
4. Chairman, EEE Curriculum Committee, BAIUST.
5. President, BAIUST Academic Guidelines Committee.
6. President, Generator Purchase Committee, BAIUST.
7. President, Electronics Lab establishment committee, BAIUST.
8. President, Machine Lab establishment committee, BAIUST.
9. President, Measurement and Instrumentation Lab establishment committee, BAIUST.
10. President, Communication Lab establishment committee, BAIUST.
11. President, Power Electronics Lab establishment committee, BAIUST.
12. Chairman, Admission Committee, Fall 2015, BAIUST.
13. Chairman, Examination Committee, Fall 2015, BAIUST.
14. Chairman, Departmental Examination committee, BAIUST.
15. President, BAIUST Dress code Committee.
16. President, BAIUST Monogram Design Committee.
17. Advisor, BAIUST EEE Club.

18. Advisor, BAIUST Robotics Society (BARS).
19. Convener, EEE Cultural Club, UAP.
20. Member, Harassment and Complaint Sub-committee, UAP.
21. Member, Costume Sub-committee, UAP.
22. Member, Library committee, UAP.
23. Member, Admission Committee, UAP.
24. In-Charge, Faculty Block-2, UAP from 2011 to 2012

Professional Membership:

Member, Institute of Engineers, Bangladesh (IEB).

Reference (s):

1. Dr. Satya Prasad Majumder

Professor, Department of Electrical and Electronic Engineering
BUET, Dhaka-1205, Bangladesh.

Email: spmajumder@eee.buet.ac.bd

Mobile: 01819198050

2. Dr. Md. Kamrul Hasan

Professor, Department of Electrical and Electronic Engineering
BUET, Dhaka-1205, Bangladesh.

Email: khasan@eee.buet.ac.bd

Mobile: 01552365843

3. Dr. Lutfu Akter

Associate Professor, Department of Electrical and Electronic Engineering
BUET, Dhaka-1205, Bangladesh.

Email: lutfaakter@eee.buet.ac.bd

Mobile: 01776197537