Md. Mehedi Hassan

Curriculum Vitae

Bagdanga, Sundarpur Nawabgani Sadar-6302 Chapai Nawabgani, Bangladesh # +880 1761 135 844 \bowtie mehedihassan.mbstu@gmail.com



Career Objective

I want to be build a career in a institution. I enhance my professional skills in the best possible way and to keep abreast of new technology.

Educational Qualifications

2019-Now M.Sc. (Engineering) in Information and Communication Technology (ICT),

Institution: Mawlana Bhashani Science and Technology University (MBSTU), Tangail, Bangladesh.

2015-2018 B.Sc. (Engineering) in Information and Communication Technology (ICT),

Institution: Mawlana Bhashani Science and Technology University (MBSTU), Tangail, Bangladesh.

CGPA: 3.94 (Out of 4.00)

2014 Higher Secondary Certificate Examination,

Institution: Nawabganj Government College, Chapai Nawabganj, Rajshahi,

Board: Rajshahi Education Board.

GPA: 5.00 (Out of 5.00)

2012 Secondary School Certificate Examination,

Institution: Harimohan Government High School, Chapai Nawabganj, Rajshahi,

Board: Rajshahi Education Board.

GPA: 5.00 (Out of 5.00)

Work Experience

2020 - now I don't have any work experience but as a fresher I will prove my skill and capability once the opportunity comes

Relevant Coursework (upto 8^{th} semester)

- Computer Programming with Lab
- Electronics with Lab
- Object Oriented Programming with Lab
- Data Structure with Lab
- Discrete Mathematics
- Digital Logic Design with Lab
- Algorithm Design and Analysis with Lab
- Signals and Systems with Lab
- Numerical Methods with Lab
- Database Management Systems with Lab
- Computer Organization and Architecture
- Operating Systems with Lab
- Microprocessor and Assembly Language with Data Mining
- Analog and Digital Communication with Lab

- Computer Networks with Lab
- Computer Peripheral and Interfacing with Lab
- Microwave Communication and Radar with
- Software Engineering with Lab
- Digital Signal Processing with Lab
- Network Security and Cyber Law
- Internet and Web Programming
- Artificial Intelligence with Lab
- Wireless and Mobile Communication with Lab
- Simulation and Modeling
- Optical Communication with Lab
- Digital Image Processing with Lab

Bachelor Thesis

Title Design of Photonic Crystal Fibers with Supporting Orbital Angular Momentum Mode Transmissions for Optical Communications.

Impact Metrics (Till 11-08-2020)

- 1. 16 citations (Google Scholar)
- 2. h-index = 3
- 3. RG Score = 9.74 (ResearchGate)

Research Interests

- 1. Optical Communications
- 2. Surface Plasmon Resonance (SPR) based PCF
- 3. Machine Learning and Deep Learning

Research Details Links

Google https://scholar.google.com/citations?user=K6aVOoQAAAAJ&hl=enScholar

ResearchGate https://www.researchgate.net/profile/Md_Hassan12

ORCID iD https://orcid.org/0000-0002-5789-8013

Journal Publications

- 1. **Hassan, M.M.**, Kabir, M.A., Hossain, M.N., Biswas, B., Paul, B.K. and Ahmed, K., 2020. Photonic crystal fiber for robust orbital angular momentum transmission: design and investigation. *Optical and Quantum Electronics*, 52(1), p.8. (Publisher = Springer, Impact Factor = 1.61, Quartile Ranking = Q2)
- 2. Hassan, M.M., Kabir, M.A., Hossain, M.N., Nguyen, T.K., Paul, B.K., Ahmed, K. and Dhasarathan, V., 2020. Numerical analysis of circular core shaped photonic crystal fiber for orbital angular momentum with efficient transmission. *Applied Physics B*, 126(9), pp.1-8. (Publisher = Springer, Impact Factor = 1.92, Quartile Ranking = Q1)
- 3. Kabir, M.A., **Hassan, M.M.**, Hossain, M.N., Paul, B.K. and Ahmed, K., 2020. Design and performance evaluation of photonic crystal fibers of supporting orbital angular momentum states in optical transmission. *Optics Communications*, p.125731. (Publisher = Elsevier, Impact Factor = 2.11, Quartile Ranking = Q1)
- 4. Kabir, M.A., **Hassan, M.M.**, Ahmed, K., Rajan, M.M., Aly, A.H., Hossain, M.N. and Paul, B.K., 2020. Novel spider web photonic crystal fiber for robust mode transmission applications with supporting orbital angular momentum transmission property. *Optical and Quantum Electronics*, 52(7), pp.1-17. (Publisher = Springer, Impact Factor = 1.61, Quartile Ranking = Q2)
- 5. Kabir, M.A., Ahmed, K., **Hassan, M.M.**, Hossain, M.M. and Paul, B.K., 2020. Design a photonic crystal fiber of guiding terahertz orbital angular momentum beams in optical communication. *Optics Communications*, p.126192. (Publisher = Elsevier, Impact Factor = 2.11, Quartile Ranking = Q1)
- 6. Israk, M.F., Razzak, M.A., Ahmed, K., **Hassan, M.M.**, Kabir, M.A., Hossain, M.N., Paul, B.K. and Dhasarathan, V., 2020. Ring-based coil structure photonic crystal fiber for transmission of Orbital Angular Momentum with large bandwidth: Outline, investigation and analysis. *Optics Communications*, p.126003. (Publisher = Elsevier, Impact Factor = 2.11, Quartile Ranking = Q1)

Conference Publications

1. Hossain, M.M., Kabir, M.A., Hassan, M.M., Parag, M.A.R., Hossain, M.N., Paul, B.K., Uddin, M.S. and Ahmed, K., 2020, February. Proposal of a Highly Birefringent Bow-Tie Photonic Crystal Fiber for Nonlinear Applications. In International Conference on Cyber Security and Computer Science (pp. 659-670). Springer, Cham.

Achievements and Certificates

Merit Department of Information and Communication Technology, Faculty of Engineering, Mawlana Bhashani Science and Technology University, in year 2016 and 2017 Scholarship

5th position of the MBSTU Math Olypiad 2016

1st position in the IT-Quiz contest of the IEEE MBSTU Student Branch Inauguration Program-2017

Participation IT-Quiz contest of the IEEE MBSTU Student Branch Inauguration Program-2017 Certificate

Participation Seminar on "EDUCATION AND THE FOURTH INDUSTRIAL REVOLUTION" held in 27 July, Certificate

Technical Skills

Programming C, C++, Java, Basic Python Language

Database MySQL

Web HTML, CSS, PHP

Development

Operating Microsoft Windows, Linux

System

Programming Code Blocks, Notepad++, Matlab, R-Studio, Anaconda, Oracle

Tool

Research Comsol Multiphysics, Matlab, Microsoft Word, Microsoft Excel and LaTex

Tools

Other Skills

Bachelor Project on playing two funny native games using C++.

Projects

Problem 100+ problem solving using C.

Solving

IEEE Student Member (Since 2019)

IEEE SB Chair at IEEE Comuter Society MBSTU Student Branch

IEEE SB IEEE Day Celebration

Program

Language Skills

English Good [Second Language] [Mother Tongue]

Bengali Excellent

Personal Information

Name Md. Mehedi Hassan

Father's Md. Shamsul Hoque

Name

Mother's Most. Moslema Khatun

Name

Date of Birth December 31, 1995

Blood Group O(+ve)

Religion Islam

Nationality Bangladeshi

Present Room Number 319 (Ka), Bangabondhu Sheikh Mujibur Rahman Hall (BSMRH), MBSTU

Address

Permanent Bagdanga, Sundarpur, Nawabganj Sadar, Chapai Nawabganj, Bangladesh

Address

References

Kawsar Ahmed Dr. Muhammad Shahin Uddin Assistant Professor, Professor and Chairman,

Department of Information and Communication Department of Information and Communication

Technology (ICT), Technology (ICT),

Mawlana Bhashani Science and Technology Uni- Mawlana Bhashani Science and Technology Uni-

versity, Santosh, versity, Santosh,

Tangail-1902, Bangladesh.

Phone:+880 1558 514 862

Tangail-1902, Bangladesh
Phone:+880 1759 852 318

Email: kawsar.ict@mbstu.ac.bd Email: shahin.uddin@mbstu.ac.bd Email: shahin.uddin@mbstu.ac.bd Email: shahin.mbstu@gmail.com

Personal Statement

I believe myself, to be the clear and logical mind with a practical approach to problem-solving and in cordiality, interested in knowledge through completion of all commitments. I wish to involve myself for doing such innovative work that will contribute to put my knowledge in practical use. I will also be dedicated by applying my skills to contribute towards the institution goal.

Sincerely,

Md. Mehedi Hassan