Bikash Kumar Paul

Curriculum Vitae

Dept of ICT, MBSTU
Santosh, Tangail-1902
Dhaka, Bangladesh
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Educational Attainment

2017 **M.Sc. (Engineering) in Information and Communication Technology (ICT)**, *Institution: Mawlana Bhashani Science and Technology University (MBSTU)*, Tangail, CGPA: **3.97** (Out of 4.00)

2015 **B.Sc. (Engineering) in Information and Communication Technology (ICT)**, *Institution: Mawlana Bhashani Science and Technology University (MBSTU)*, Tangail, CGPA: **3.65** (Out of 4.00) (*last 2 years CGPA **3.87***)

Experience

2022- now *Assistant Professor, Department of Information and Communication Technology,* ***Mawlana Bhashani Science and Technology University, Tangail-1902, Bangladesh.***

2020- now *Research Mentor, Department of Software Engineering,* ***Daffodil International University, Savar, Dhaka, Bangladesh.***

2020- 2022 *Lecturer, Department of Information and Communication Technology,* ***Mawlana Bhashani Science and Technology University, Tangail-1902, Bangladesh.***

2019- 2020 *Lecturer (Senior), Department of Software Engineering,* ***Daffodil International University, Savar, Dhaka, Bangladesh.***

2017-2019 *Lecturer, Department of Software Engineering,* ***Daffodil International University, Savar, Dhaka, Bangladesh.***

2017-2017 *Lecturer, Department of Computer Science and Engineering,* ***Ranada Prasad Shaha University,12 Sahed Bappi Sharoni Road, Narayanganj.***

Awards

1 *Ranked **2nd**, **8th** and **17th** topper based on Scopus indexed scientific article publishing among all the researchers in Bangladesh in the year of **2019**, **2018** and **2017** respectively; Analyzed by Scientific Bangladesh*

2 ***Research Excellence Award 2020**, Faculty of Engineering, Mawlana Bhashani Science and Technology University (MBSTU)*

3 ***Best Academic Research Leader** of the Year, Daffodil International University (DIU) in **2020**, **2019** and **2018***

Selected Journal Publications

1 Ali, M.M., **Paul, B.K.**, Ahmed, K., Bui, F.M., Quinn, J.M. and Moni, M.A., 2021. Heart disease prediction using supervised machine learning algorithms: Performance analysis and comparison. Computers in Biology and Medicine, 136, p.104672. **IF = 4.589, Elsevier.**

2 Khan, T., **Paul, B.K.**, Hasan, M.T., Islam, M.R., Arefin, M.A., Ahmed, K., Islam, M.K. and Moni, M.A., 2021. Significant pathway and biomarker identification of pancreatic cancer associated lung cancer. Informatics in Medicine Unlocked, p.100637. **Cite Score = 3.8, Elsevier.**

3 Taz, T.A., Ahmed, K., **Paul, B.K.**, Al-Zahrani, F.A., Mahmud, S.H. and Moni, M.A., 2021. Identification of biomarkers and pathways for the SARS-CoV-2 infections that make complexities in pulmonary arterial hypertension patients. Briefings in Bioinformatics, 22(2), pp.1451-1465. **IF = 11.622, Oxford University Press.**

4 Taz, T.A., Ahmed, K., **Paul, B.K.**, Kawsar, M., Aktar, N., Mahmud, S.H. and Moni, M.A., 2021. Network-based identification genetic effect of SARS-CoV-2 infections to Idiopathic pulmonary fibrosis (IPF) patients. Briefings in Bioinformatics, 22(2), pp.1254-1266. **IF = 11.622, Oxford University Press.**

5 Jabin, M.A., Luo, Y., Peng, G.D., Rana, M.J., Ahmed, K., Nguyen, T.K., **Paul, B.K.** and Dhasarathan, V., 2020. Design and fabrication of amoeba faced photonic crystal fiber for biosensing application. Sensors and Actuators A: Physical, 313, p.112204. **IF = 3.407, Elsevier.**

6 **Paul, B.K.**, Ahmed, K., El-Khozondar, H.J., Pobre, R.F., Peña, J.S.G., Merciales, M.C., Zainuddin, N.A.A.M., Zakaria, R. and Dhasarathan, V., 2020. The design and analysis of a dual-diamond-ring PCF-based sensor. Journal of Computational Electronics, 19(3), pp.1288-1294. **IF = 1.807, Springer.**

7 **Paul, B.K.**, Ahmed, K. and Aktar, M.N., 2020. Carbon disulphide (CS 2) enriched photonic crystal fiber for nonlinear application: a FEM scheme. Optical and Quantum Electronics, 52(5), pp.1-13. **IF = 2.084, Springer.**

8 **Paul, B.K.**, Ahmed, K., Dhasarathan, V. and Nguyen, T.K., 2020. Oligoporous-core Quasi cladding photonic crystal fiber based micro-sensor for alcohol detection. Physica B: Condensed Matter, 584, p.412104. **IF = 2.436, Elsevier.**

9 **Paul, B.K.** and Ahmed, K., 2020. Analysis of terahertz waveguide properties of Q-PCF based on FEM scheme. Optical Materials, 100, p.109634. **IF = 3.080, Elsevier.**

10 Paul, B.K. and Ahmed, K., 2019. Highly birefringent TOPAS based single mode photonic crystal fiber with ultra-low material loss for Terahertz applications. Optical Fiber Technology, 53, p.102031. **IF = 2.53, Elsevier.**

11 **Paul, B.K.**, Bhuiyan, T., Abdulrazak, L.F., Sarker, K., Hassan, M.M., Shariful, S. and Ahmed, K., 2019. Extremely low loss optical waveguide for terahertz pulse guidance. Results in Physics, 15, p.102666. **IF = 4.476, Elsevier.**

12 Jabin, M.A., Ahmed, K., Rana, M.J., **Paul, B.K.**, Luo, Y. and Vigneswaran, D., 2019. Titanium-coated dual-core D-shaped SPR-based PCF for hemoglobin sensing. Plasmonics, 14(6), pp.1601-1610. **IF = 2.404 , Springer.**

13 **Paul, B.K.**, Ahmed, K., Rahman, S.M., Shanthi, M., Vigneswaran, D. and Zakaria, R., 2019. Numerical analysis of a highly nonlinear microstructured optical fiber with air-holes arranged in spirals. Optical Fiber Technology, 51, pp.90-95. **IF = 2.530 , Elsevier.**

14 **Paul, B.K.**, Ahmed, K., Vigneswaran, D., Sen, S. and Islam, M.S., 2019. Quasi photonic crystal fiber for chemical sensing purpose in the terahertz regime: design and analysis. Optical and Quantum Electronics, 51(7), pp.1-12. **IF = 2.084, Springer.**

15 Jabin, M.A., Ahmed, K., Rana, M.J., **Paul, B.K.**, Islam, M., Vigneswaran, D. and Uddin, M.S., 2019. Surface plasmon resonance based titanium coated biosensor for cancer cell detection. IEEE Photonics Journal, 11(4), pp.1-10. **IF = 2.084, IEEE.**

16 **Paul, B.K.**, Khalek, M.A., Chakma, S. and Ahmed, K., 2018. Chalcogenide embedded quasi photonic crystal fiber for nonlinear optical applications. Ceramics International, 44(15), pp.18955-18959. **IF = 4.527 , Elsevier.**

17 **Paul, B.K.**, Ahmed, K., Vigneswaran, D., Ahmed, F., Roy, S. and Abbott, D., 2018. Quasi-photonic crystal fiber-based spectroscopic chemical sensor in the terahertz spectrum: Design and analysis. IEEE Sensors Journal, 18(24), pp.9948-9954. **IF = 3.303 , IEEE.**

18 Ahmed, K., Chowdhury, S., **Paul, B.K.**, Islam, M.S., Sen, S., Islam, M.I. and Asaduzzaman, S., 2017. Ultrahigh birefringence, ultralow material loss porous core single-mode fiber for terahertz wave guidance. Applied optics, 56(12), pp.3477-3483. **IF = 1.980, OSA.**

19 Ahmed, K.,**Paul, B.K.**, Vasudevan, B., Rashed, A.N.Z., Maheswar, R., Amiri, I.S. and Yupapin, P., 2019. Design of D-shaped elliptical core photonic crystal fiber for blood plasma cell sensing application. Results in Physics, 12, pp.2021-2025. **IF= 4.476, Elsevier.**

20 **Paul, B.K.**, Islam, M.S., Ahmed, K. and Asaduzzaman, S., 2017. Alcohol sensing over O+ E+ S+ C+ L+ U transmission band based on porous cored octagonal photonic crystal fiber. Photonic Sensors, 7(2), p.123. **IF = 2.433, Springer.**

Selected Conference Proceedings

1 Akhi, A.J., Ahmed, K., Habib, M.A., **Paul, B.K.**, Akram, M.R. and Saha, S., 2023. Identification of Molecular Signatures and Pathways of Nasopharyngeal Carcinoma (NPC) Using Network-Based Approach. In The Fourth Industrial Revolution and Beyond: Select Proceedings of IC4IR+ (pp. 587-599). Singapore: Springer Nature Singapore.

2 M. A. Basar, M. F. Hosen, M. A. Amin, N. I. Bithi, and **Paul, B.K.**. A bioinformatics and system biology technique to identify candidate biomarkers and functional pathways among stress and depression. In 2022 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), pp. 143-146. IEEE, 2022.

3 M. F Hosen, M. A. Basar, **Paul, B.K.**, M. R. Hasan, and M. S. Uddin. A bioinformatics approach to identify candidate biomarkers and common pathways between bipolar disorder and stroke, In 2022 12th International Conference on Electrical and Computer Engineering (ICECE), pp. 429-432. IEEE, 2022.

4 Al Amin, Md, **Paul, B.K.**, and Nasima Islam Bithi. Real time Detection and Localization of Colorectal Polyps from Colonoscopy Images: A Deep Learning Approach. In 2022 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), pp. 58-61. IEEE, 2022.

5 **Paul, B.K.**, Md Shadidul Islam, Sawrab Chowdhury, Sayed Asaduzzaman, and Kawsar Ahmed. Porous core Photonic Crystal Fiber based chemical sensor. In 2016 9th International Conference on Electrical and Computer Engineering (ICECE), pp. 251-254. IEEE, 2016.

6 Islam, Md Rakibul, Md Liton Ahmed, **Paul, B.K.**, Sayed Asaduzzaman, and Kawsar Ahmed. Common gene regulatory network for anxiety disorder using cytoscape: detection and analysis. In Bioinformatics and Biomedical Engineering: 7th International Work-Conference, IWBBIO 2019, Granada, Spain, May 8-10, 2019, Proceedings, Part II 7, pp. 209-218. Springer International Publishing, 2019.

Impact Metrics (Till 28-11-2023)

1 Google Scholar Citations = 4300

2 h-index = 38

3 i10-index = 94

4 ResearchGate Score = 33.11

Research Details Link

G. Scholar `https://scholar.google.com/citations?user=NyvyzaOAAAAJ&hl=en`

ResearchGate `https://www.researchgate.net/profile/Bikash_Kumar_Paul2`

WoS `https://www.webofscience.com/wos/author/record/Q-6045-2017`

Online Judge

UVa `https://uhunt.onlinejudge.org/id/163122`

Language Proficiency

IELTS Overall: 7; Listening: 7.5, Reading: 6, Writing: 6.5, Speaking: 7

Memberships

IEEE Member at Institute of Electrical and Electronics Engineers [2015- Now]