

MD KAFIUL ISLAM, *PhD, SMIEEE, MIEB*

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Google Scholar Profile: <https://scholar.google.com/citations?user=PkkxL14AAAAJ>

Institutional Profile: http://iub.ac.bd/academics/departments/eee/faculty-and-staff/kafiul_islam

PROFILE SUMMARY

A highly motivated and passionate academic researcher and a strong believer in translational biomedical research from bench to bedside, which can make services and products accessible and affordable to the mass population.

- ☐ Professional experience: **17+ years**
- ☐ No. of courses taught: **17** (13 UG and 4 Grad)
- ☐ No. of indexed publications: Scopus **65**/WoS **58**/ IEEE **37** (10 Q1, 10 Q2, 2 Q3, 1 Q4, 35 conference, 4 book chapters)
- ☐ Total WoS Impact Factor: **60+**
- ☐ No. of Citations: **GS 2560/ (i-10 index 39)/Scopus 1320/ WoS 775 /RG 2060/ IEEE 375**
- ☐ *h-index*: **GS 22 / Scopus 16 / WoS 11 / RG 21**
- ☐ No. of research grants: **17** (10 as PI and 7 as Co-PI)
- ☐ No. of students supervised: **90+** (17 internship, 66 senior projects/FYDP, 7 Grad thesis, 1 PhD thesis)
- ☐ Avg. faculty evaluation score: **4.25** (out of 5.00)
- ☐ TPC member or reviewer: **65+** conferences
- ☐ Track (Co-)Chair: **10** conferences
- ☐ Session (Co-)Chair/Judge: **25** conferences
- ☐ Member of Editorial Board: **6** Peer-reviewed Journals
- ☐ (Guest) Associate Editor: IEEE Access (**Only** from IUB and **among 10** having Bangladeshi affiliation), Frontiers in Comp. Neuroscience (Special Issue)
- ☐ No. of Best Paper/Presentation/Abstract/Poster Awards: **10** (in international conferences/symposiums) (**Highest** number in SETS, IUB)
- ☐ No. of Awarded Supervised Projects: **12** (national project showcase competitions) (**Highest** number in EEE, IUB)
- ☐ No. of Invited/Keynote Speeches/Guest Talks/Workshop Resource Person: **45+**
- ☐ No. of Int'l Conference Presentation as (Co-)Author: **14+**
- ☐ Publons/WoS Peer Reviewer Award: **01** (Multidisciplinary category in 2017) (**Only** person at IUB)
- ☐ Best Reviewer Award: ICCAS 2022 in Singapore and Recognized Elsevier Reviewer since 2016
- ☐ WoS verified Reviews and Editorial Activities: **559** Reviews and **177** Editorial records (*ranked #1* at IUB and ranked among the **Top 2%** of Bangladeshi Scientists)
- ☐ IEEE Achievements: Senior Member since 2019 and **Outstanding** IEEE Student Branch Counselor in 2020 and 2022 (*honourable mention*) (Only branch counsellor in the history of IEEE IUB SB since 2011)
- ☐ IEEE Reported Events on vTools as Branch Counselor: **100+** (The **highest** number in the history of IEEE IUB SB since 2011)
- ☐ ResearchGate (RG) Research Interest Score: **2650** and RG Reads: **255 K+** (**Top 2-3%** among RG profiles in EEE, CS and BME category, Consistently achieved top stats record among EEE IUB profiles every week for last 5 years)
- ☐ Academia.Edu Profile Rank: **Top 2-3%**

- ☐ AD Scientific Index Ranking: *ranked #1* at IUB in EEE category, ranked **#5** among all IUB profiles according to Last 6 years i-10 Index, **Top 3%** among Bangladeshi Scientists according to *h-index*, **Top 1%** among Bangladeshi Scientists according to *Last 6 year's i-10 Index and Citations*, **Top 10%** among Asian Scientists, **Top 15%** among World Scientists)
- ☐ Ranked among **top 4-5%** scholar in *overall* fields and **Top 1-2%** scholar in *Electroencephalography* field of research according to SCHOLARGPS® 2025 ranking.
- ☐ Top 100 most-read authors for March 2024 in *Computational Intelligence and Neuroscience* according to ResearchGate.

EDUCATION

National University of Singapore

Jan 2011 to Dec 2015

Ph.D. in Electrical and Computer Engineering

Thesis Title: *Artifact Characterization, Detection and Removal from Neural Signals*

Islamic University of Technology, Dhaka, Bangladesh

Dec 2004 to Nov 2008

B.Sc. in Electrical and Electronic Engineering

Overall GPA: 4.94

Class Position: 4th (top 5%)

RESEARCH INTEREST

- **Neural Signal Processing:** Artifact detection and removal; Spike detection and sorting; Signal classification, Epilepsy seizure detection; etc.
- **Other Biomedical Signal Processing:** ECG, EMG and PPG signal analysis and processing; detection of diagnostic information; etc.
- **Neural Engineering:** Basic neuroscience studies; Brain-Computer Interfaces; and Neural prostheses.
- **Healthcare Applications and Patient Monitoring:** Medical devices; Wearable technologies; Implantable electronics; etc.

COURSES TAUGHT

Undergraduate (Theory)

1. ECR305 / EEE321 : Digital Signal Processing	2. ECR407 / EEE 234 : Electronics-II
3. EEE461 : Biomedical Instrumentation	4. EEE465 : Biomedical Signal Processing
5. ECR 206 / EEE211: AC Circuits	6. EEE 231: Signals and Systems
7. EEE 131: Electrical Circuits - I	8. EEE450 / EEE466 : VLSI Design
9. CSE484 / EEE426 : Intelligent System Engineering / Intro. to Neural Networks	10. EEE 411: Control Systems
11. ECR209 : Microprocessors and Interfacing	12. EEE 402 : Transmission and Distribution of Power
13. EEE 490 : Special Topics in EEE	

Undergraduate (Lab)

▪ ECR209L : Microprocessors and Interfacing Lab	▪ EEE308L: Control Systems Lab
▪ ECR205L: Digital Logic Design Lab	▪ ECR305L: Digital Signal Processing Lab

Graduate

▪ EEE 542 : Artificial Intelligence and Neural Networks	▪ EEE506 : Advanced Digital Signal Processing
▪ EEE507 : Digital Image and Video Processing	▪ EEE533 : Advanced VLSI Design and Testing

WORK EXPERIENCE

Independent University, Bangladesh	Mar 2026 - Present
<i>Professor, Dept. of EEE, SETS</i>	<i>Dhaka</i>
Center for Computational & Data Sciences (CCDS)	Feb 2026 - Present
<i>Director, Biomedical Instrumentation and Signal Processing Lab ((BISPL) Wing</i>	<i>IUB, Bashundhara R/A, Dhaka</i>
Independent University, Bangladesh	Feb 2020 - Feb 2026
<i>Associate Professor, Dept. of EEE, SETS</i>	<i>Dhaka</i>
Board of Accreditation for Engineering and Technical Education (BAETE), Institute of Engineers, Bangladesh (IEB)	Nov, 2023 - Present
<i>Associate Director, Quality Assurance</i>	<i>Ramna, Dhaka</i>
Independent University, Bangladesh	June 2016 – Jan 2020
<i>Assistant Professor, Dept. of EEE, SECS</i>	<i>Dhaka</i>
Independent University, Bangladesh	Aug 2009 – May 2016
<i>Junior Lecturer, SECS</i>	<i>Dhaka</i>
EE5507 Analog IC Analysis and Design, ECE, NUS	Jan 2014 - May 2014
<i>Graduate Teaching Assistant</i>	<i>Singapore</i>
Signal Processing and VLSI Lab, ECE, NUS	Jan 2011 - Dec 2014
<i>PhD Research Scholar</i>	<i>Singapore</i>
TSS Group, ECE, NUS	Aug 2012 - Dec 2012
<i>Graduate Student Researcher</i>	<i>Singapore</i>
Digital Electronics Lab, NUS	Aug 2011 - May 2014
<i>Graduate Teaching Assistant</i>	<i>Singapore</i>
Stamford University Bangladesh	Jan 2009 - May 2009
<i>Lecturer and Executive, Dept. of Electrical and Electronic Engineering</i>	<i>Dhaka</i>
International Islamic University Chittagong	Nov 2008 - Dec 2008
<i>Lecturer, Dept. of Electrical and Electronic Engineering</i>	<i>Chittagong, Bangladesh</i>

HONORS AND AWARDS

Three Mentored Project students received Inspiring Award in the category of Outstanding Research Achievement in 2025 by Dept. of EEE, IUB	Fresher's Fiesta, Autumn 2025. Dept. of EEE, IUB
Mentored Project student received Best Student Researcher (Non-CSE Major) Award	Annual CSE Research Day (CARD) 2025 Dept. of CSE, IUB
Two Mentored Project students received Inspiring Award by Dept. of EEE, IUB	Fresher's Day, Spring 2025. Dept. of EEE, IUB
Supervised conference paper titled "Design and Implementation of a Low-cost Digital Stethoscope-Based Phonocardiogram (PCG) Acquisition System for Telemedicine Application" received Best Presentation Award	Dec 2024 27th ICCIT 2024 at Cox's Bazar
Mentored Project "A Cost-Efficient Device for Individuals with Cerebral Palsy Utilizing IoT" by IUB_Technable wins the 1st Runner-Up Award	National RoboFest, EWU, 2024
Mentored Project "A Cost-Efficient Device for Individuals with Cerebral Palsy Utilizing IoT" by <i>Team Shoyaok</i> wins the 1st Runner-Up Award	Cisco IoT Hackathon, AIUB, 2024
Mentored Project on "AAC for Children with Communication Challenged" by IUB Technable received 1st Prize Award in the Innovation Idea Pitching/Project Showcasing Category.	IUB EEE Innovation Fest, Organized by Dept. of EEE, October, 2024
Supervised FYDP titled "Impact of Artifact Removal on Epileptic Seizure Detection" received 1st Prize Award by Industry-Advisory Panel evaluation	Intra-Dept. FYDP Poster Presentation and Project Demonstration, Dept. of EEE, Spring 2024
Supervised FYDP titled "EEG-based Mouse Cursor Control using Motor Imagery-based Brain-Computer Interface" received 1st Prize Award for 3-minute thesis presentation competition.	3-Minutes Thesis Presentation Competition IEEE BDS Co-Located Events, ICEEICT 2024 MIST May 4, 2024
Supervised FYDP titled "EEG-based Mouse Cursor Control using Motor Imagery-based Brain-Computer Interface" received 1st Prize Award by Industry-Advisory Panel evaluation	Intra-Dept. FYDP Poster Presentation and Project Demonstration, Dept. of EEE, Summer 2023
Mentored project TeamBISPL received a Runners-Up Award at Intra-Dept. Poster Presentation Competition	EEE Project Show, TechFest, Summer 2023, IUB
Outstanding Young Scholar Award	ICCCAS 2023, Singapore
Best Presentation Award	ICCCAS 2023, Singapore
International Research Awards on Information and Computer Applications under the category of " Best Paper Award "	International Research Awards on Information and Computer Applications, May, 2023, ScienceFather
International Research Awards on Information and Computer Applications under the category of " Most Cited Paper Award "	International Research Awards on Information and Computer Applications, May, 2023, ScienceFather
Outstanding Branch Counselor (honorable mention) for 2022 representing IEEE IUB Student Branch at the " IEEE BDS Awards Night "	March 2023 IEEE Bangladesh Section
Asia's Outstanding Researcher Award	ASTRA 2023 (Asia's Science, Technology, and Research Awards).
Best Abstract Award	IEEE CS BDC Summer Symposium 2022
2nd Runner-Up Abstract Award	IEEE CS BDC Summer Symposium 2022
Best Presentation Award	ICCCAS 2022, Singapore

Best Reviewer Award	ICCCAS 2022, Singapore
Led BISPL to become #1 ranked Biomedical Engineering Research Group among private universities in BD	SCIMAGO Institutional Ranking 2022 (Category: Biomedical Engineering)
Young Scientist Award	ISSN International Science & Technology Awards and Congress (IISTAC-2022) by ISSN International Research Awards 2022 and World Research Council, India
Member of the Team that Won among Top 10 Ideas during Mujib100 Idea Contest at IC4IRB 2021 conference	Dec 2021 IC4IRB- UGC and BD ICT Division
Featured in Who's Who in Engineering Academia	2020 Academic Keys, LLC, USA
Publications Excellence "THE EMPLOYEE RECOGNITION & AWARDS CEREMONY" in Three categories: 1) Journal Articles 2) Conference Papers 3) Book Chapters	Dec 2020 Independent University, Bangladesh
Led as a Counselor of IEEE IUB SB to win the Outstanding Student Branch award in 2020 recognized by IEEE BDS.	Dec 2020 IEEE Bangladesh Section
Outstanding Branch Counselor representing IEEE IUB Student Branch at the "IEEE BDS Awards Night"	Dec 2020 IEEE Bangladesh Section
Outstanding Paper Award on "Emerging Technology in Computing" at ETCCE'20	Dec 2020 International conference on Emerging Technology in Computing, Communication and Electronics, 2020, at UIU, Dhaka (Jointly organized by UIU and UMP, Malaysia)
Young Scientist Award by ScienceFather , a trademark of Scifax Company	Dec 2020 International Research Awards on New Science Inventions, NESIN 2020 Awards, India
Best Researcher Award by VDGOOD Professional Association	Sep 2020 10th International Scientist Awards on Engineering, Science, and Medicine, Hyderabad, India
Selected as a 2021 Who's Who in the World® Lifetime Achievement Award Recipient!	Marquis Who's Who Publications, NY 11556. USA
Best Presentation Award <i>Technical Session: Control and Automation</i>	Jan 2020 ICDPR 2020 at NTU, Singapore
Certified Publons Academy Mentor Verified mentor to students of the Publons Academy	April 2019- Present
Elevated to Senior Member of IEEE One of the Youngest to Achieve this Honor in BD	Jan 2019
Best Presentation Award <i>Technical Session: Signal and Image Processing Track</i>	Dec 2018 ICCIT 2018 at UIU
Among Top Reviewers for Multidisciplinary <i>Recognition for Peer Review Records</i>	Sep 2017 Publons
Outstanding Reviewer <i>Recognition for Peer Review Record</i>	2016 and 2017 BSPC and AIM (Elsevier)
Mentored the project EOG CONTROLLED MOUSE CURSOR that received First Prize AWARD	Robo-Fest, ICASERT 2019 at EWU
Mentored project EOG CONTROLLED Robotic Arm received Champion Award at Project Showcase Competition	EEE Day 2018, Independent University, Bangladesh

Mentored the project EOG CONTROLLED ELECTRIC WHEELCHAIR that received First Prize AWARD at 4 places	ICEEICT 2018 at MIST, Youth Zest 2018, MAKER'S MANIA at IUB 2018, Science for Mankind 2018 at DU.
Mentored project received Champion Award at Inter-University Poster Presentation Competition	IEEE Day 2018, IUB
Mentored project received Champion Award at Inter-University Poster Presentation Competition	Brunch Fest 2018, BUP
NUS Research Scholarship	Jan 2011 - Dec 2014
<i>During PhD Study</i>	<i>Singapore</i>
OIC Full-free Scholarship at IUT	Jan 2005 - Dec 2007
<i>During Undergrad Study</i>	<i>Dhaka, Bangladesh</i>
Board Scholarship for H.S.C result	2004
<i>During College Study</i>	<i>Dhaka Education Board, Bangladesh</i>
Board Scholarship for S.S.C result	2002
<i>During School Study</i>	<i>Barisal Education Board, Bangladesh</i>
Junior Scholarship	2000
<i>2 years in School</i>	<i>Barisal Education Board, Bangladesh</i>

FUNDED PROJECTS

Fiscal Year	Title of Project	Fund Received (Taka)	Funding Authority – Role
2025 – 2026	AI-Powered EEG Analysis for Early Detection and Monitoring of Parkinson's Disease	8,75,160 BDT	IUB (Sponsored Research Grant) – PI
2023-2024	Design and Development of a Low-cost EOG-based Human Machine Interface (HMI) for Physically Challenged People (Phase - II)	19,98,000 BDT (<i>Applied</i>)	GARE-BANBEIS (External Grant) – PI
2023 – 2024	Design and Development of a Non-invasive Measurement System for Monitoring the Vital Blood Parameters of Newborn (Phase 1)	14,30,000 BDT (<i>Applied</i>)	GARE-BANBEIS (External Grant) – PI
2026 – 2027	AI-Driven EEG Analysis for Early Detection and Screening of Mental Health Conditions and Academic Performance Correlation among University Students	27,80,000 BDT (<i>Applied</i>)	IUB (Sponsored Research Grant) – PI
2024 – 2025	Analysis of Artifacts on the Performance of EEG-based Brain-Computer Interface (BCI) Applications	1,96,000 BDT	IUB (VC Research Fund) – PI
2022 – 2023	Application of Biomedical Signal Processing, Analysis, and Classification to Identify the Biomarkers of Stroke for Early Prediction and Post-Stroke Recovery	6,75,000 BDT	IUB (Sponsored Research Grant) – Co-PI
2024 – 2025	Neuroimaging in Early Identification of Neonatal Brain Injury	1,00,000 BDT	IUB (VC Research Fund) – Co-PI
2024 – 2025	Screening Young Adults for Generalized Anxiety Disorder (GAD): Simultaneous Analysis of EEG Recordings with Validated Screening Tools	11,34,600 BDT (<i>Received Partial Fund</i>)	IUB (Sponsored Research Grant) – PI
2021 – 2022	Development and Establishment of an Industry-Academia Collaboration Wing at SETS	21,12,750 BDT	IUB (Sponsored Research Grant) – Co-PI
2021 – 2022	EEG Based Preference Classification for Neuro-marketing Application	4,72,490 BDT	IUB (Sponsored Research Grant) – PI
2021 – 2022	DEEP-DEPRESSION - Feasibility exploration of BCI tools for the classification of depressed brain activity	19,95,355 BDT (<i>Received Partial Fund</i>)	ICT Ministry Innovation Fund – Co-PI

2021 – 2022	Feasibility to Design and Development of Brain Computer Interface (BCI) Based System for Identifying Suicidal Biomarkers using Neural Connectivity Analysis	24,98,570 BDT	IAR UIU Research Grant - Co-PI
2020-2021	Screening of Depression in Young Adults: Simultaneous Analysis of EEG Recordings with Validated Screening Tools	5,60,000 BDT	IUB (Sponsored Research Grant) – Co-PI
2020-2021	Design and Development of a Low-cost EOG-based Human Machine Interface (HMI) for Physically Challenged People	4,76,000 BDT	IUB (Sponsored Research Grant) – PI
2019-2020	EEG signal processing and analysis from wireless EEG-headset recordings for neurological disease diagnosis and for Brain-Computer Interface (BCI) applications.	4,80,000 BDT	IUB (Sponsored Research Grant 2019-SECS-11) – PI
2018 - 2019	EEG signal processing and analysis from wireless EEG-headset recordings for neurological disease diagnosis and for Brain-Computer Interface (BCI) applications.	1,86,500 BDT	Dept. of EEE/IUB – PI
2017 - 2018	Development of a portable ECG monitoring system for rural/remote areas of Bangladesh	78,000 BDT	Dept. of EEE/IUB – PI
	EEG signal processing and analysis from wireless EEG-headset recordings for neurological disease diagnosis and for Brain-Computer Interface (BCI) applications	64,800 BDT	Dept. of EEE/IUB – PI
2016-2017	Design and Implementation of Android App-based Wearable Real-time Body Temperature Monitoring and Alert System for Children with Risk of Febrile Convulsions.	64,800 BDT	Dept. of EEE/IUB – PI

ADMINISTRATIVE EXPERIENCES

- **Convener**, Committee for Program Accreditation (2026)
- Member, Ranking Committee at IUB
- **Convener**, Undergraduate Student Research Affinity Group, IUB
- **Chair**, Program Self-Assessment Committee (PSAC), Dept. of EEE, Independent University, Bangladesh
- **Lab Head**, [Biomedical Instrumentation and Signal Processing Lab](#) (BISPL)
- Ex-**Convener** of Course Review Committee, Dept. of EEE, Independent University, Bangladesh
- Ex-**Convener** of Question Moderation Committee, Dept. of EEE, Independent University, Bangladesh
- Member of Committee of Procurement, Dept. of EEE, Independent University, Bangladesh
- Member of Committee of Branding and Promotion, Dept. of EEE, Independent University, Bangladesh
- Member of Committee of Teaching & Research Enhancement, Dept. of EEE, Independent University, Bangladesh
- Member of Committee of Laboratory Resources, Dept. of EEE, Independent University, Bangladesh
- Member of Committee of Graduate & Undergraduate Studies, Dept. of EEE, Independent University, Bangladesh
- Member of Committee of Courses, Dept. of EEE, Independent University, Bangladesh

SELECTED PUBLICATIONS

Summary of Publications (2010 - Present)

	Scopus Indexed	Others	Total
Book Chapters	04	00	04

Journal Articles	Q1 10	Q2 10	Q3 02	Q4 01	06	29
Conference Papers	38				00	38
Total Publication	65				06	71

Book Chapter(s)

1. Mutasim, Aunnoy K., Rayhan Sardar Tipu, M. Raihanul Bashar, Md Kafiul Islam, and M. Ashraful Amin. "Computational Intelligence for Pattern Recognition in EEG Signals." In Computational Intelligence for Pattern Recognition, pp. 291-320. Springer, Cham, 2018.
2. Islam M.K., Rastegarnia A., Sanei S. (2021) Signal Artifacts and Techniques for Artifacts and Noise Removal. In: Ahad M.A.R., Ahmed M.U. (eds) Signal Processing Techniques for Computational Health Informatics. Intelligent Systems Reference Library, vol 192. Springer, Cham.
3. Sheikh Farhana Binte Ahmed, Saiful Islam Leon, Jarina Akter, Maisha Anjum, Nazmus Sakib, Tasnuva Faruk, Md. Kafiul Islam. "Recent Trends in EEG-Based MI and SSVEP Brain-Computer Interface Applications - A Review". Published in Ganesh Naik, Wellington Pinheiro Dos Santos, and Gaetano Gargiulo (eds)- Fundamentals of Advanced EEG Analytical Methods: from Acquisition to Application, CRC Press, 2024.
4. Sheikh Farhana Binte Ahmed, Md. Tawhid Islam Opu, Mehedi Hasan, Faisal Bin Shahin, Md. Ahsan-Ul Kabir Shawon, Tasnuva Faruk, Md. Kafiul Islam. "Recent Trends in EEG-Based P300, Neuromarketing and E-Sports Brain-Computer Interface Applications - A Review". Published in Ganesh Naik, Wellington Pinheiro Dos Santos, and Gaetano Gargiulo (eds)- Fundamentals of Advanced EEG Analytical Methods: from Acquisition to Application, CRC Press, 2024.

Journal Articles

1. Sayem Rafique, Zawwad Bin Saif, Saima Tasfia Roja, Shantanu Rahman, Nazmus Sakib, Rafia Akhter, Md. Kafiul Islam. "Multi-Channel EEG Dataset on Motor Imagery Limb Movements" - Under Review at Data in Brief (2025). (Q1 ranked Journal, IF =1.4). Uploaded Dataset can be found in <https://data.mendeley.com/datasets/c92c2n5t34/1> and <https://data.mendeley.com/datasets/rz2jhpvh3/2>
2. Tasfia Hasan Faiza, Muhammad Sajid Hossain, Samara Islam, Nazmus Sakib, Tasnuva Faruk, Md. Kafiul Islam, "Raw fetal PCG dataset contaminated with Mother's PCG"- Data in Brief, Volume 63, 2025, 112107, ISSN 2352-3409, <https://doi.org/10.1016/j.dib.2025.112107>. (Q1 ranked Journal, IF =1.4). Uploaded Dataset can be found in <https://data.mendeley.com/datasets/k5z7hf6vbb/1>
3. Ahmed, Sheikh Farhana Binte, Md Ruhul Amin, and Md Kafiul Islam. "Motion Artifact Contaminated Multichannel EEG Dataset." Data in Brief (2024): 110994. (Q1 ranked Journal, IF =1.4). Uploaded Dataset can be found in <https://data.mendeley.com/datasets/42pphfbcdk/2>
4. Asif Mohammad Mithu, Tasnuva Faruk, and Md. Kafiul Islam, "A Review on Progress in Wearable Temperature Monitoring for Children having Risk of Febrile Convulsion: Current Status and Future Directions". - Working Paper to be submitted to a Q1/Q2 ranked journal, 2024.
5. Md. Kafiul Islam and Amir Rastegarnia, "Editorial: Recent Advances in EEG (Non-invasive) Based BCI Applications" - Special Issue - *Frontiers in Computational Neuroscience*, 2023. (Q2 ranked Journal, WoS IF = 3.387) ([Most Viewed Editorial in last 1.5 years, 90% Views Rank](#))
6. Nazmus Sakib, Md. Kafiul Islam, and Tasnuva Faruk, "Machine Learning Model for Computer-Aided Depression Screening Among Young Adults using Wireless EEG Headset" - *Computational Intelligence and Neuroscience* (1701429), 2023 (Q1 ranked Journal, WoS IF = 3.633)
7. Jannatul Ferdous Srabonee, Fazla Rabbi Mashrur, Umaima Afifa, Antora Dev, N. Roy, Md. Kafiul Islam, Chiranjeev Biswas, Helal Uddin Ahmed, Md. Ashraful Amin, Farhana Sarker, Ravi Vaidyanathan, and Khondaker A. Mamun, "An EEG-based Machine Learning Framework for Depression Detection using Effective Connectivity Analysis" - Under Review at *IEEE Journal of Translational Engineering in Health and Medicine*. (Q2 ranked Journal, WoS IF = 2.53)
8. Injamamul Haque Sourov, Faiyaz Alvi Ahmed, Md. Tawhid Islam Opu, Aunnoy K. Mutasim, M. Raihanul Bashar, Rayhan Sardar Tipu, Md. Ashraful Amin and Md Kafiul Islam, "EEG-based preference classification for

neuromarketing application", *Computational Intelligence and Neuroscience* (4994751), 2023 (**Q1 ranked Journal, WoS IF = 3.633**)

9. Said AGOUNAD, Soukaina HAMOU, Ousama TARAHI, Mustapha MOUFASSIH, and Md Kafiul ISLAM, "Intelligent fuzzy system for automatic artifact detection and removal from EEG signals". *Journal of King Saud University - Computer and Information Sciences*, 2022 (**Q1 ranked Journal, WoS IF = 9.006**)
10. T Faruk, MK Islam: "Freecycling for the Future: Lesson Learned from Freecycle at IUB". *Academia Letters* 4869, 2022.
11. Antora Dev, N. Roy, Md. Kafiul Islam, Chiranjeeb Biswas, Helal Uddin Ahmed, Md. Ashraful Amin, Farhana Sarker, Ravi Vaidyanathan, and Khondaker A. Mamun: "Exploration of EEG-based Depression Biomarkers Identification Techniques and their Applications: A Systematic Review". *IEEE Access*, 2022 (**Q1 ranked Journal, WoS IF = 3.9**)
12. Asma Islam, Eshrat Jahan Esha, Sheikh Farhana Binte Ahmed, and Md. Kafiul Islam: "Study and Analysis of Motion Artifacts for Ambulatory EEG". *International Journal of Electrical and Computer Engineering (IJECE)*, 2021. (**Q2 ranked Journal**)
13. Md Kafiul Islam, Parviz Ghorbanzadeh, Amir Rastegarnia: "Probability Mapping Based Artifact Detection and Removal from Single-Channel EEG Signals for Brain-Computer Interface Applications". *Journal of Neuroscience Methods* 2021. (**Q2 ranked Journal, WoS IF = 2.987**)
14. Amir Jalilifard, Amir Rastegarnia, Ednaldo Brigante Pizzolato and Md. Kafiul Islam: Classification of Emotions Induced by Horror and Relaxing Movies Using Single-Channel Recording. *International Journal of Electrical and Computer Engineering (IJECE)*, 2020. (**Q2 ranked Journal**)
15. Amir Jalilifard, Dehua Chen, Aunnoy K Mutasim, M Raihanul Bashar, Rayhan Sardar Tipu, Md Ahsan-Ul Kabir, Nazmus Sakib, M. Ashraful Amin, and Md Kafiul Islam, "Spontaneous Blinking for Human Authentication." in *Engineering Science and Technology, an International Journal (JESTECH)*, 23(4), 903-910, 2020. (**Q1 ranked Journal, WoS IF = 5.155**)
16. Tasnuva Faruk, Catherine King, Mohammad Muhit, Md Kafiul Islam, Kamran ul Baset, Nadia Badawi, and Gulam Khandaker, "Screening Tools for Early Identification of Children with Developmental Delay in Low- and Middle-income Countries: A Systematic Review." in *BMJ Open* 2020;10:e038182. doi: 10.1136/bmjopen-2020-038182 (**Q1 ranked Journal, WoS IF = 3.007**)
17. Padmavathi Kora, K Meenakshi, K Swaraja, A Rajani, and Md. Kafiul Islam: "Detection of Cardiac Arrhythmia using Fuzzy logic". *Informatics in Medicine Unlocked*, 2019. (**Q2 ranked Journal, WoS IF = 0.440**)
18. Alam, Sayed Tanvir, Md Moin Hossain, Mohammad Dehan Rahman, and Md Kafiul Islam. "Towards Development of a Low Cost and Portable ECG Monitoring System for Rural/Remote Areas of Bangladesh." *International Journal of Image, Graphics & Signal Processing* 10, no. 5 (2018). (**Q3 ranked Journal**)
19. Iqbal, Mirza Mursalin, and Kafiul Islam. "Design and simulation of a PV System with battery storage using bidirectional DC-DC converter using MATLAB Simulink." *International Journal of Scientific & Technology Research* 6 (2017): 403-410. (**Q3 ranked Journal**)
20. M. K. Islam, and Z. Yang. Methods for artifact detection and removal from scalp EEG: A review. In *Clinical Neurophysiology*, 46.4 (2016): 287-305. (**Q2 ranked Journal, WoS IF = 3.1**) ([One of Most Cited Articles](#))
21. Rastegarnia, Amir, Azam Khalili, and Md Kafiul Islam. "A Self-Organizing Diffusion Mobile Adaptive Network for Pursuing a Target." *American Journal of Signal Processing* 6, no. 2 (2016): 25-31. (Indexed in **Index Copernicus**)
22. Pak, Amin Lotfzad, Azam Khalili, Md Kafiul Islam, and Amir Rastegarnia. "A Distributed Target Localization Algorithm for Mobile Adaptive Networks." *ECTI Transactions on Electrical Engineering, Electronics, and Communications* 14, no. 2 (2016): 47-56. (**Q4 ranked Journal, WoS IF = 0.148**)
23. Khalili, Azam, Amir Rastegarnia, Md Kafiul Islam, and Tohid Yousefi Rezaei. "Steady-State Tracking Analysis of Adaptive Filter with Maximum Correntropy Criterion." *Circuits, Systems, and Signal Processing* (2016): 1-10. (**Q2 ranked Journal, WoS IF = 2.311**)
24. Rastegarnia, Amir, Azam Khalili, Vahid Vahidpour, and Md Kafiul Islam. "Frequency Estimation of Unbalanced Three-Phase Power Systems Using the Modified Adaptive Filtering." *American Journal of Signal Processing* 5, no. 2A (2015): 16-25. (Indexed in **Index Copernicus**)
25. Islam, Md Kafiul, Amir Rastegarnia, and Azam Khalili. "A Robust Distributed Estimation Algorithm under Alpha-Stable Noise Condition." *Journal of Communication Engineering* 4, no. 2 (2015): 76-85.
26. Jian Xu, Menglian Zhao, Xiaobo Wu, M. K. Islam, and Zhi Yang. A High Performance Delta-Sigma Modulator for Neurosensing. In Special Issue of *Sensors* under Biosensors section: *Power Schemes for Biosensors and Biomedical Devices*, June, 2015. (**Q1 ranked Journal, WoS IF = 3.847**)

27. T Faruk, MK Islam, S Arefin, MZ Haq. The Journey of Elastography: Background, Current Status and Future Possibilities in Breast Cancer Diagnosis. In *Clinical Breast Cancer*, 2015, 15(5), 313-324. (**Q2 ranked Journal, WoS IF = 3.078**)
28. M. K. Islam, A. Rastegarnia, and Z. Yang. A Wavelet-Based Artifact Reduction from Scalp EEG for Epileptic Seizure Detection. In *IEEE Journal of Biomedical and Health Informatics*, 2015, v. 20(5), pp. 1321-1332. (**Q1 ranked Journal, WoS IF = 7.021**)
29. M. K. Islam, A. Rastegarnia, A. T. Nguyen, and Z. Yang. Artifact characterization and removal for in vivo neural recording. Published in *Journal of Neuroscience Methods* 226:110-123, 2014. (**Q2 ranked Journal, WoS IF = 2.987**)
30. MK Islam, ANMM Haque, G Tangim, T Ahammad, and MRH Khondokar. Study and Analysis of ECG Signal Using MATLAB & LABVIEW as Effective Tools. In *International Journal of Computer and Electrical Engineering* 2012, 4:3, pp. 404-408. (Indexed in **IET INSPEC & EBSCO**)

Conference Papers

1. Farhun Ibne Mizan, Md Shahriar Haque Kanon, Pushpa Dayita Sengupta, Marjana Khanam Torsha, Nazmus Sakib, Tasnuva Faruk, and Md Kafiul Islam, "Machine Learning Approach For Detecting Interictal Epileptiform Discharge From Sleep EEG" - Under Review at IEEE BECITHCON 2025 in Dhaka. (indexed in IEEE Xplore and Scopus).
2. Rizu Ahmed, Md Ashikur Rahman, Md. Al Nomun, Abu Saleh Md. Seam, Nazmus Sakib, and Md Kafiul Islam, "Analysis of Machine Learning Algorithms on Lie Detection using EEG Signal: An Experimental Study" - Under Review at 28th IEEE ICCIT 2025 in Cox's Bazar. (indexed in IEEE Xplore and Scopus).
3. Nazmus Sakib, Md Kafiul Islam and Tasnuva Faruk, "EEG Based Multi-Level Stress Screening Using Machine Learning" - Accepted and presented at RAAI 2025 in Singapore. (indexed in IEEE Xplore and Scopus).
4. Sayem Bin Rafique, Zawwad Bin Saif, Saima Tasfia Roja, Nazmus Sakib and Md Kafiul Islam, "Multi-Directional Cursor Control via Motor Imagery-Based BCI using Scalp EEG: A Comparative Machine Learning Approach" - Accepted and presented at RAAI 2025 in Singapore. (indexed in IEEE Xplore and Scopus).
5. Tusher Chandra Das, Monosij Chakraborty, Sadia Afrin, Suraia Yasmin Rattre, Nazmus Sakib, Tasnuva Faruk, and Md Kafiul Islam, "Machine Learning based Epileptic Seizure Prediction using EEG Signal" – Under Review at STI 5.0 2025, GUB. (indexed in IEEE Xplore and Scopus).
6. T. H. Faiza, M. S. Hossain, S. Islam, N. Sakib, T. Faruk and M. K. Islam, "Fetal Heart Rate Extraction from a Noisy Maternal-Fetal Heart Sound Using EMD and Wavelet Transform," 2025 International Conference on Quantum Photonics, Artificial Intelligence, and Networking (QPAIN), Rangpur, Bangladesh, 2025, pp. 1-5, doi: 10.1109/QPAIN66474.2025.11172077. (indexed in IEEE Xplore and Scopus).
7. N. Sakib, M. K. Islam and T. Faruk, "A Machine Learning Approach for Multi-Level Anxiety Screening among University-Going Students using Wireless EEG Signals," 2024 7th Asia Conference on Cognitive Engineering and Intelligent Interaction (CEII), Singapore, Singapore, 2024, pp. 21-25, doi: 10.1109/CEII65291.2024.00013. (indexed in IEEE Xplore and Scopus).
8. S. F. Binte Ahmed, N. Sakib, M. R. Islam, T. Faruk and M. K. Islam, "Machine Learning Approaches for Motion Artifact Identification and Classification from EEG Signal," 2024 7th Asia Conference on Cognitive Engineering and Intelligent Interaction (CEII), Singapore, Singapore, 2024, pp. 16-20, doi: 10.1109/CEII65291.2024.00012. (indexed in IEEE Xplore and Scopus).
9. Sheikh Arafat, DEWAN MD. AKIB, Md. Asraf Uddin Ridoy, Nazmus Sakib, Tasnuva Faruk, and Md Kafiul Islam, "Design and Implementation of a Low-cost Digital Stethoscope-Based Phonocardiogram (PCG) Acquisition System for Telemedicine Application" – 2024 27th International Conference on Computer and Information Technology (ICCIT), Cox's Bazar, Bangladesh, 2024, pp. 2197-2202, doi: 10.1109/ICCIT64611.2024.11022587. (indexed in IEEE Xplore and Scopus). **Best Presentation Award**
10. MOBARAK HOSSEN MOLLAH EMON, Ariful Hasan Akash, Tahmid Ahmed Bhuiyan, TAZIN SHARIN, Nazmus Sakib, Tasnuva Faruk, and Md Kafiul Islam, "Machine Learning based Neuromuscular Disease Detection and Classification Using EMG Signal" – 2024 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), Chennai, India, 2024, pp. 422-426, doi: 10.1109/WIECON-ECE64149.2024.10914752. (indexed in IEEE Xplore and Scopus).
11. P. Prosad, S. A. Refat, Z. Ahmed, N. Sakib, T. Faruk and M. K. Islam, "Impact of Artifact Removal from EEG Signals on Epileptic Seizure Detection," 2024 IEEE International Conference on Biomedical Engineering, Computer and Information Technology for Health (BECITHCON), Dhaka, Bangladesh, 2024, pp. 306-311, doi: 10.1109/BECITHCON64160.2024.10962631. (indexed in IEEE Xplore and Scopus).

12. Nazmus Sakib, Md Kafiul Islam, and Tasnuva Faruk, "Machine Learning Approach for Classification of Severity of Depression using Wireless EEG among Young Adults" – 2024 13th International Conference on Electrical and Computer Engineering (ICECE), Dhaka, Bangladesh, 2024, pp. 247-251, doi: 10.1109/ICECE64886.2024.11024727. (indexed in IEEE Xplore and Scopus).
13. Nazmus Sakib, Tasnuva Faruk, and Md Kafiul Islam, "Effect of Artifact Removal in Machine Learning Based Anxiety Screening using EEG Signal" – 2025 4th International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST), Dhaka, Bangladesh, 2025, pp. 498-503, doi: 10.1109/ICREST63960.2025.10914438. (indexed in IEEE Xplore and Scopus).
14. Roja, Saima Tasfia, Sayem Bin Rafique, Md Asikur Rhaman, Nazmus Sakib, and Md Kafiul Islam. "EEG-based Mouse Cursor Control using Motor Imagery Brain-Computer Interface." In 2024 6th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT), pp. 1042-1047. IEEE, 2024. (indexed in IEEE Xplore)
15. Nazmus Sakib, Md Kafiul Islam and Tasnuva Faruk, "Effect of Artifact Removal in Machine Learning Based Depression Screening using EEG" – 8th International Conference on Biomedical Imaging, Signal Processing (ICBSP 2023), Singapore (indexed in Ei Compendex and Scopus). DOI: <https://doi.org/10.1145/3634875.3634892>
16. Nazmus Sakib, Tasnuva Faruk and Md Kafiul Islam, "Wireless EEG based Anxiety Screening Among Young Adults using Machine Learning Model" – 8th International Conference on Biomedical Imaging, Signal Processing (ICBSP 2023), Singapore (indexed in Ei Compendex and Scopus). DOI: <https://doi.org/10.1145/3634875.3634889>
17. Jannatul Ferdous Srabonee, Umair Afifa, Md. Kafiul Islam, Chiranjeev Biswas, Helal Uddin Ahmed, and Khondaker Abdullah-AL Mamun, "Identifying Major Depressive Disorder using EEG Data: Supervised and Unsupervised Machine Learning Approach" - *submitted* at the IEEE International Conference on Systems, Man, and Cybernetics (SMC), 2023.
18. Nazmus Sakib, Md Kafiul Islam and Tasnuva Faruk, "Machine Learning Based Depression Screening Among Young Adults using Wireless EEG" – *accepted and presented* at the 12th International Conference on Communications, Circuits and Systems (ICCCAS 2023), Singapore. Published in 2023 International Conference on Artificial Intelligence Innovation (ICAI). DOI: <https://doi.org/10.1109/ICAI59460.2023.10497265>
19. Maisha Anjum, Nazmus Sakib and Md Kafiul Islam, "Effect of Artifact Removal on EEG based Motor Imagery BCI Applications" - *accepted and presented* at the 12th International Conference on Communications, Circuits and Systems (ICCCAS 2023), Singapore (indexed in IEEE Xplore) - **Best Presentation Award**. Published in Proc. SPIE 12984, Fourth International Conference on Computer Vision and Information Technology (CVIT 2023), 1298409. DOI: <https://doi.org/10.1117/12.3020879>
20. Bassma, Rizuan Ahmed Rifat, Md. Kafiul Islam, "Skin Disease Screening System Based on Smartphone Captured Images Using Deep Learning", - 11th International Conference on Communications, Circuits and Systems (ICCCAS 2022), Singapore, 2022 (indexed in IEEE Xplore) - **Best Presentation Award**
21. Md. Saiful Islam Leon, Jarina Akter, Nazmus Sakib, and Md. Kafiul Islam, "Analysis of EEG signal Classification for Application in SSVEP based BCI using Convolutional Neural Network", - International Conference on Big Data, IoT and Machine Learning (BIM 2021), Cox's Bazar, 2021. (published in *Springer*)
22. Pranti Tawheed, Jyoti Mollick, Nazmus Sakib, and Md Kafiul Islam, "Development of a Low-cost PC-based Single-channel EEG Acquisition System for Educational and Research Purpose", - 9th IEEE Region 10 Humanitarian Technology Conference (R10 HTC 2021), Bangalore, India. (indexed in IEEE Xplore)
23. Tadi Chowdhury, Salwa Khan, Tasnuva Faruk, and Md Kafiul Islam, "Design and Implementation of a Low-cost Real-Time Vein Imaging for Developing Countries", - International Conference on Automation, Control and Mechatronics for Industry 4.0 (ACMI 2021), RUET, Rajshahi, 2021. (indexed in IEEE Xplore)
24. Tanvir Ahmed and Md. Kafiul Islam: "EMG Signal Classification for Detecting Neuromuscular Disorders" – ICASSCT 2021, India. (indexed in *Scopus* and *WoS*)
25. Chowdhury Sayef Abdullah, Masud Kawser, Md Tawhid Islam Opu, Tasnuva Faruk, and Md. Kafiul Islam: "Human Fall Detection using Built-in Smartphone Accelerometer" - IEEE WIECON ECE 2020, India. (indexed in IEEE Xplore)
26. Anika Alim and Md. Kafiul Islam: "Application of Machine Learning on ECG Signal Classification Using Morphological Features" - IEEE Region-10 Symposium (TENSYP) 2020, Dhaka. (indexed in IEEE Xplore)
27. Ahsan-ul Kabir, Faisal Bin Shahin, and Md. Kafiul Islam: "Design and Implementation of an EOG-based Mouse Cursor Control for Application in Human-Computer Interfacing" - 4th International Conference on Data Processing and Robotics (ICDPR 2020) held on Jan. 17-19, 2020 in Singapore (indexed in Scopus and Web of Science) - **Best Presentation Award**

28. Md. Kafiul Islam and Amir Rastegarnia: "Artifact Removal Algorithm from EEG Signal by Optimizing Mother Wavelet and Threshold Parameters" - ETCCE at UIU, 2020. (indexed in *IEEE Xplore*) - **Best Paper Award**
29. Shohag Hossain, Shraboni Sharmin, Tasnuva Faruk, Md Kafiul Islam: "Low-Cost Digitization of Infusion Pump for Realtime Automated Flow Rate Monitoring and Warning" - 2019 International Conference on Innovation in Engineering and Technology (ICIET), held at DU (indexed in *IEEE Xplore*)
30. Nazmus Sakib and Md. Kafiul Islam: "Design and Implementation of an EMG Controlled 3D Printed Prosthetic Arm" - Presented at the 2019 IEEE Conference on Biomedical Engineering, Computer and Information Technology for Health (IEEE BECITHCON 2019). (indexed in IEEE Xplore)
31. Tauhid Anwar, Mohammad Zubair, Mohammad Dehan Rahman, Nazmus Sakib, Md. Ahsan-Ul Kabir, Tasnuva Faruk, and Md Kafiul Islam: "Design and Development of a Portable Recording System for Simultaneous Acquisition of SCG and ECG Signals" - at the 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT), 2019 held at EWU, Dhaka (indexed in IEEE Xplore & Scopus).
32. Md Kafiul Islam and Amir Rastegarnia: "Probability Mapping Based Artifact Detection and Wavelet Denoising based Artifact Removal from Scalp EEG for BCI Applications" - at the IEEE 4th International Conference on Computer and Communication Systems (ICCCS), 2019 held at NTU@One North, Singapore (indexed in IEEE Xplore & Scopus).
33. Md. Fahim Bhuyain, Md. Ahsan-Ul Kabir Shawon, Nazmus Sakib, Tasnuva Faruk, Md. Kafiul Islam, Khosru M. Salim: "Design and Development of an EOG-based System to Control Electric Wheelchair for People Suffering from Quadriplegia or Quadriparesis" - at the International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST), 2019 held at AIUB, Dhaka (indexed in IEEE Xplore).
34. Sagar Dakua, Alamgir Kabir, Nazmus Sakib, Md. Ahsan-Ul Kabir Shawon, and Md. Kafiul Islam: "Towards Design and Implementation of a Low-cost EMG Signal Recorder for Application in Prosthetic Arm Control for Developing Countries like Bangladesh" - at the 21st International Conference on Computer and Information Technology, 2018 (ICCIT, 2018) held at UIU, Dhaka (indexed in IEEE Xplore) - **Best Presentation Award**
35. Mutasim, Aunnoy K., M. Raihanul Bashar, Rayhan Sardar Tipu, Md Kafiul Islam, and M. Ashraful Amin. "Effect of Artefact Removal Techniques on EEG Signals for Video Category Classification." In 2018 24th International Conference on Pattern Recognition (ICPR), pp. 3513-3518. IEEE, 2018. (indexed in IEEE Xplore).
36. Amir Jalilifard, Alfredo Guilherme da Silva, and Md Kafiul Islam: Brain-TV Connection: Toward Establishing Emotional Connection with Smart TVs. Accepted and Presented at IEEE R10 HTC Conference, BUET, Dhaka, 2017. (indexed in IEEE Xplore).
37. Jalilifard, Amir, Ednaldo Brigante Pizzolato, and Md Kafiul Islam. "Emotion classification using single-channel scalp-EEG recording." In Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the, pp. 845-849. IEEE, 2016. (indexed in IEEE Xplore).
38. Islam, MK, Tuan NA, Zhou Y, Yang Z. Analysis and processing of in vivo neural signal for artifact detection and removal. Published in the 5th International Conference on Biomedical Engineering and Informatics (BMEI), p. 43742, 2012, China. (indexed in IEEE Xplore).
39. Xu, J., Islam, M. K., Wang, S., and Yang, Z. A 13 μ W 87dB dynamic range implantable Δ - Σ modulator for full-spectrum neural recording. Published in the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp. 2764-2767, July, 2013. (indexed in IEEE Xplore).
40. Azam Khalili, Amir Rastegarnia, Md K. Islam, and Zhi Yang. A bio-inspired cooperative algorithm for distributed source localization with mobile nodes. Published in the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp. 3515-3518, July, 2013. (indexed in IEEE Xplore).

Abstracts in Symposium

1. Prosad, Partho; Sakib, Nazmus; Faruk, Tasnuva; Islam, Md Kafiul. "The Effect of Artifact Removal from EEG Signals on the Detection of Epileptic Seizures." - Accepted for presentation at the IEEE Computer Society Bangladesh Chapter Symposium (IEEECSBDCS) 2025.
2. Sayem Bin Rafique, Roja, Saima Tasfia, Zawwad Bin Saif, Nazmus Sakib, and Md Kafiul Islam. "EEG-based Mouse Cursor Control using Motor Imagery Brain- Computer Interface." - Presented at the IEEE Computer Society Bangladesh Chapter Symposium (IEEECSBDCS) 2024.

3. Sheikh Farhana Binte Ahmed and Md Kafiul Islam. "Motion Artifact Removal for EEG Applications" - Presented at the IEEE Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 2022. (**Best Abstract Award**)
4. Maisha Anjum, Nazmus Sakib, and Md Kafiul Islam. "Effect of Artifact Removal on EEG Based Motor Imagery BCI Applications." - Presented at the IEEE Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 2022. (**2nd Runner-Up Abstract Award**)
5. Nazmus Sakib and Md Kafiul Islam. "Exploration of Different Filtering and Classification Methods to Find Optimum Solution for MI-BCI using EEG" - Presented at the IEEE Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 2022.
6. Md. Tawhid Islam Opu and Md Kafiul Islam. "Investigation of Artifacts Presence in Selected EEG Based Neuromarketing Dataset & Preference Classification" -Presented at the IEEE Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 2022.
7. Md. Ahsan-Ul Kabir Shawon, Faisal Bin Shahin, Nazmus Sakib, and Md Kafiul Islam. "Design and Development of a Low-cost EOG-based Human Machine Interface (HMI) for Physically Challenged People" -Presented at the IEEE Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 2022.
8. Saiful Islam Leon and Md Kafiul Islam. "Analysis of EEG signal Classification for Application in SSVEP based BCI using Convolutional Neural Network" -Presented at the IEEE Computer Society Bangladesh Chapter Summer Symposium (IEEE CS BDC SS) 2022.

Conference/Seminar/Workshop/Webinar/Invited/Keynote Presentations (Oral / Poster / Online)

1. Md Kafiul Islam, "Preparing EEE Department for curriculum, teaching-learning, assessment and evidence requirements under the new accreditation criteria" - presented as a **Keynote speaker** at the Training Session on BAETE Manual Version 3.0 organized by Dept. of EEE, IUB for its faculty members on 09 July 2026.
2. Md Kafiul Islam, "Curriculum Design based on Outcome" - presented as a **Resource person** at the Hands-on Training Session on OBE organized by BAETE-IEB, 03-04 July 2026.
3. Md Kafiul Islam, "Curriculum Design based on Outcome" - presented as a **Resource person** at the Hands-on Training Session on OBE organized by BAETE-IEB, 26-27 June 2026.
4. Md Kafiul Islam, "Introducing the research activities of Biomedical Instrumentation & Signal Processing Lab (BISPL) and its future opportunities" - presented a Seminar organized by CENTER FOR COMPUTATIONAL & DATA SCIENCES (CCDS), IUB, 21 May, 2026.
5. Md Kafiul Islam, "OBE-based Teaching, Learning, and Assessment" - presented as a **Workshop Resource person** during the Orientation Session for the New and Adjunct Faculty Members of EEE dept., organized by Dept. of EEE, IUB, 29 Jan, 2026.
6. Md Kafiul Islam, "Multi-Directional Cursor Control via Motor Imagery-Based BCI using Scalp EEG: A Comparative Machine Learning Approach" - presented at the 5th RAAI 2025 at NTU, Singapore in Dec 19, 2025.
7. Md Kafiul Islam, "Module 7: Evaluating Attainment of Program Outcomes" - presented as a **Resource person** at the Hands-on Orientation for Tier-1 Program Evaluators organized by BAETE-IEB at ITN, BUET on 30 Aug, 2025.
8. Md Kafiul Islam, "Module 8: Writing Evaluation Team Report" - presented as a **Resource person** at the Hands-on Orientation for Tier-1 Program Evaluators organized by BAETE-IEB at ITN, BUET on 30 Aug, 2025.
9. Md Kafiul Islam, "Module 7: Evaluating Attainment of Program Outcomes" - presented as a **Resource person** at the Hands-on Orientation for Tier-1 Program Evaluators organized by BAETE-IEB at ITN, BUET on 23 Aug, 2025.
10. Md Kafiul Islam, "Module 8: Writing Evaluation Team Report" - presented as a **Resource person** at the Hands-on Orientation for Tier-1 Program Evaluators organized by BAETE-IEB at ITN, BUET on 23 Aug, 2025.
11. Md Kafiul Islam, "Machine Learning Model for Anxiety Screening among Young Adults Using Wireless EEG Headset". presented as **Invited Speech** at the ICCAS 2025 at Wuhan, China.
12. Md Kafiul Islam, "Addressing Complex Engineering Problems and Activities with Rubrics Development" - presented as a **Resource person** at a Day-log Training on OBE organized by BAETE-IEB at ITN, BUET on 23 May, 2025.
13. Md Kafiul Islam, "Addressing Complex Engineering Problems and Activities with Rubrics Development" - presented as a **Resource person** at a Day-log Training on OBE organized by BAETE-IEB at IEB Seminar Hall on 16 May, 2025.

14. Md Kafiul Islam, "Addressing Complex Engineering Problems and Activities with Rubrics Development" - presented as a **Resource person** at a Day-log Training on OBE organized by BAETE-IEB at ITN, BUET on 03 May, 2025.
15. Md Kafiul Islam, "Machine Learning Model for Computer-Aided Depression Screening among Young Adults Using Wireless EEG Headset". presented as **Invited Speech** at the UCICS 2025 at Varendra University, Rajshahi.
16. Sheikh Farhana Binte Ahmed, Nazmus Sakib, Mohammad Rakibul Islam, Tasnuva Faruk, and Md Kafiul Islam, "Machine Learning Approaches for Motion Artifact Identification and Classification from EEG Signal" - presented at the 7th Asia Conference on Cognitive Engineering and Intelligent Interaction (CEII 2024), Singapore (indexed in IEEE Xplore and Scopus).
17. Md Kafiul Islam, "Self-Assessment Report (SAR) Writing for BAETE Accreditation" - presented as a **Resource person** in a Discussion session with SAC of Dept. of EEE, IUT on 10 May, 2024.
18. Md Kafiul Islam, "Self-Assessment Report (SAR) Writing and Preparation for On-site Visit for BAETE Accreditation" - presented as a **Resource person** at a Regional Workshop organized by BAETE-IEB in Rajshahi on 25 Apr, 2024.
19. Md Kafiul Islam, "Addressing Complex Engineering Problems and Activities with Rubrics Development" - presented as a **Resource person** at a Discussion Session organized by Dept. of EEE, IUT, 1st Mar, 2024.
20. Md Kafiul Islam, "Outcome-based Curriculum Design for BAETE Accreditation" - presented as a **Resource person** at the Hands-on Session on OBE organized by BAETE-IEB, 10 Feb, 2024.
21. Md Kafiul Islam, "Curriculum Design based on Outcome" - presented as a **Resource person** at the Hands-on Training on OBE organized by BAETE-IEB, 3 Feb, 2024.
22. Md Kafiul Islam, "Wireless EEG based Anxiety Screening Among Young Adults using Machine Learning Model" – *presented at* the 8th International Conference on Biomedical Imaging, Signal Processing (ICBSP 2023), Singapore (indexed in Ei Compendex and Scopus).
23. Md Kafiul Islam, "Use of machine learning and deep learning in biomedical signal classification and their applications in healthcare". presented as **Invited Talk** in a Seminar organized by ESAB AIUB Unit Face at AIUB, June 21, 2023.
24. Md Kafiul Islam, "BAETE Accreditation for Engineering Programs- Attainment Calculation of Course and Program Outcomes, CQI Process and Preparation". **Invited Speaker** of the Workshop organized by Institutional Quality Assurance Cell (IQAC) of Independent University, Bangladesh (IUB), 15 June 2023.
25. Md Kafiul Islam, "EEG based Emotion Classification for Applications in Depression Screening, Neuromarketing and Smart Recommendation System". Presented as **Guest Talk** at the GIFT Autonomous, Bhubaneswar, Odisha, India, on July 27, 2023.
26. Md Kafiul Islam, "EEG-Based Emotion Recognition for Depression Detection, Smart Recommender System and Neuromarketing, Their Current Status and Potential Applications in Social Media Context". Presented as **Keynote Speech** at the EAI 2nd International Conference on Intelligent Systems and Machine Learning (EAI ICISML 2023), July 27-28, 2023, Cuttack, Odisha, India.
27. Md Kafiul Islam, "Managing Academic Profiles and Understanding Research Article Indexing". Invited Speaker of the Workshop organized by Institutional Quality Assurance Cell (IQAC) of Independent University, Bangladesh (IUB), 8 June 2023.
28. Md Kafiul Islam, "Use of machine learning and deep learning in biomedical signal classification and their applications in healthcare". presented as **Keynote Speech** at the International Congress on Recent Trends in Computer Science - (ICRCS 2023), March 2023 (ONLINE).
29. Md Kafiul Islam, "Motion Artifact Removal for Ambulatory EEG Monitoring: Challenges and Opportunities". presented as **Invited Speech** at 2023 5th International Conference on Image, Video and Signal Processing, Singapore (IVSP), March, 2023 (ONLINE).
30. Md Kafiul Islam, "Prospects and Challenges of an EOG-based Human Machine Interface (HMI) for Physically Challenged People". Presented as **Invited Speech** at 2023 the 12th International Conference on Communications, Circuits and Systems (ICCCAS), May 5-7, 2023, Singapore.
31. Md Kafiul Islam, "Effect of Artifact Removal on EEG based Motor Imagery BCI Applications" - *presented at* the 12th International Conference on Communications, Circuits and Systems (ICCCAS 2023), Singapore. **Best Presentation Award**

32. Md Kafiul Islam, "Introducing Biomedical Instrumentation & Signal Processing Lab: BISPL@IUB and Its Research Activities". Webinar presented as **Invited Speaker** jointly organized by IEEE Superior University Student Branch, Karachi, Pakistan, IEEE IUB Student Branch, and IEEE WIE IUB Student Branch Affinity Group on Feb 6, 2023.
33. Md Kafiul Islam, "Recent Trends and Challenges in Artifact Detection and Removal from Biomedical Signals - An Overview". presented as **Invited Speech** at 3rd ICREST 2023 at AIUB, Dhaka.
34. Md Kafiul Islam, "Recent Trends in Artifact Detection and Removal for Biomedical Signal Processing and Analysis". presented as **Invited Speech** at VSIP 2022 in China (Virtual Conference).
35. Md Kafiul Islam, "Spontaneous Blinking for Human Authentication". presented as **Invited Speech** at ICCAS 2022 in Singapore.
36. **Resource person** for conducting a training session on "Outcome Based Teaching-Learning and Assessment" for the Orientation of New Faculty Members joined at the Department of EEE, on 19th May, 2022.
37. **Resource person** for conducting "Workshop on OBE" for faculty members of the EEE Dept. at IUB on 22nd Jan, 2022.
38. Conducted a seminar as a **Invited Speaker** titled "Introduction to Outcome-Based Education (OBE)" on 5th January 2022 (Wednesday) at the Islamic University of Technology (IUT) for the student of Dept. of EEE, IUT.
39. Md Kafiul Islam, "Current Trends in EEG Signal Processing for Brain-Computer Interface (BCI) Applications: Challenges and Opportunities" presented as **Invited Speech** at ICCCM 2021 in Singapore.
40. Tadib Chowdhury, Salwa Khan, Tasnuva Faruk, and Md Kafiul Islam, "Design and Implementation of a Low-cost Real-Time Vein Imaging for Developing Countries", - Presented at International Conference on Automation, Control and Mechatronics for Industry 4.0 (ACMI 2021), RUET, Rajshahi, 2021. (indexed in *IEEE Xplore*)
41. Invited as a **Keynote Speaker** to deliver a talk on "[Use of spontaneous blinking for application in human authentication](#)" at the 9th Int'l Conference on Signal and Image Processing (CSIP_D 2021).
42. Tanvir Ahmed and Md. Kafiul Islam: "EMG Signal Classification for Detecting Neuromuscular Disorders" - Presented at ICASSCT 2021, India. (indexed in *Scopus* and *WoS*)
43. Delivered an **Invited Talk** on "Importance of AI and Machine Learning for Engineering Students and Graduates" organized by GyanJam Ltd. in Feb, 2021.
44. Chowdhury Sayef Abdullah, Masud Kawser, Md Tawhid Islam Opu, Tasnuva Faruk, and Md. Kafiul Islam: "Human Fall Detection using Built-in Smartphone Accelerometer" - Presented in IEEE WIECON ECE 2020, India. (indexed in *IEEE Xplore*)
45. Conducted an **Online Workshop** on "Professional Communication through Email Writing" on Sep 5, 2020 organized by IEEE IUB Student Branch.
46. Anika Alim and Md. Kafiul Islam: "Application of Machine Learning on ECG Signal Classification Using Morphological Features" - IEEE Region-10 Symposium (TENSYP) 2020, Dhaka. (indexed in *IEEE Xplore*)
47. Ahsan-ul Kabir, Faisal Bin Shahin, and Md. Kafiul Islam: "Design and Implementation of an EOG-based Mouse Cursor Control for Application in Human-Computer Interfacing" - 4th International Conference on Data Processing and Robotics (ICDPR 2020) held on Jan. 17-19, 2020 in Singapore (indexed in *Scopus* and *Web of Science*). [**Best Presentation Award**]
48. Md. Kafiul Islam and Amir Rastegarnia: "Artifact Removal Algorithm from EEG Signal by Optimizing Mother Wavelet and Threshold Parameters"- ETCCE at UIU, 2020. (indexed in *IEEE Xplore*). [**Best Paper Award**]
49. Nazmus Sakib and Md. Kafiul Islam: "Design and Implementation of an EMG Controlled 3D Printed Prosthetic Arm" - Presented at the 2019 IEEE Conference on Biomedical Engineering, Computer and Information Technology for Health (IEEE BECITHCON 2019). (indexed in *IEEE Xplore*)
50. Md Kafiul Islam and Amir Rastegarnia: "Probability Mapping Based Artifact Detection and Wavelet Denoising based Artifact Removal from Scalp EEG for BCI Applications" - at the IEEE 4th International Conference on Computer and Communication Systems (ICCCS), 2019 held at NTU@One North, Singapore (indexed in *IEEE Xplore* & *Scopus*).
51. Md. Fahim Bhuyain, Md. Ahsan-Ul Kabir Shawon, Nazmus Sakib, Tasnuva Faruk, Md. Kafiul Islam, Khosru M. Salim: "Design and Development of an EOG-based System to Control Electric Wheelchair for People Suffering from Quadriplegia or Quadriparesis" - at the International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST), 2019 held at AIUB, Dhaka (indexed in *IEEE Xplore*).

52. Islam, MK: "State-of-the-Art EEG Signal Processing Techniques in the Diagnosis and Treatment of Neurological Diseases." **Invited Talk** at the 2nd IBRO-APRC Bangladesh Associate School of Translational Neuroscience and Research, at UIU, Dec, 2019.
53. Islam, MK: "Biomedical Signal Processing & Analysis Techniques: Challenges and Applications" - **Invited Talk** in a Seminar organized by IEEE AUST Student Branch at AUST, Sep, 2019.
54. Islam, MK: "Biomedical Signal Processing & Analysis Techniques: Challenges and Applications"- **Invited Talk** in a Seminar organized by IEEE AIUB Student Branch at AIUB, Oct, 2019.
55. **Conducted** MATLAB Workshop for the students of EEE dept. on Spring 2019 which was organized by IEEE IUB Student Branch.
56. Delivered an **Invited Talk** on "*Smartphone Sensors and its Potential Applications*" during Google I/O Extended 2018 organized by GDG, Sonargaon, held at IUB.
57. Sagar Dakua, Alamgir Kabir, Nazmus Sakib, Md. Ahsan-Ul Kabir Shawon, and Md. Kafiul Islam: "Towards Design and Implementation of a Low-cost EMG Signal Recorder for Application in Prosthetic Arm Control for Developing Countries like Bangladesh" - at the 21st International Conference on Computer and Information Technology, 2018 (ICCIT, 2018) held at UIU, Dhaka (indexed in IEEE Xplore). **[Best Presentation Award]**
58. Amir Jalilifard, Alfredo Guilherme da Silva, and Md Kafiul Islam: Brain-TV Connection: Toward Establishing Emotional Connection with Smart TVs. Accepted and Presented at IEEE R10 HTC Conference, BUET, Dhaka, 2017. (indexed in IEEE Xplore).
59. Islam, MK "Introduction of EEG" - **Guest Lecture** delivered as invited by the graduate course instructor of "EEE541: Biomedical Electronics", Dr. Mustafa Habib Chowdhury at the Dept. of EEE, IUB.
60. Islam, MK, Tuan NA, Zhou Y, Yang Z. Analysis and processing of in vivo neural signal for artifact detection and removal. Published in the 5th International Conference on Biomedical Engineering and Informatics (BMEI), p. 43742, 2012, China. (indexed in IEEE Xplore).

Published Open-Access Dataset:

1. Akther, Rafia; Rafique, Sayem; SAIF, ZAWWAD; Roja, Saima Tasfia; Islam, Kafiul (2025), "EEG MI-BCI Multidirectional Mouse Cursor Dataset (Open-BCI Ultra cortex mark-IV)", Mendeley Data, V2, doi: 10.17632/rz2jhpvh3.2
2. Sakib, Nazmus; Islam, Md. Saiful; Akter, Jarina; Opu, Md. Tawhid Islam; Anjum, Maisha; Shawon, Md. Ahsan-Ul Kabir; Adiba, Ara; Faruk, Tasnuva; Islam, Md Kafiul (2025), "Multi-channel Wireless EEG Recordings of Young Adults for Anxiety Screening based on GAD-7", Mendeley Data, V2, doi: 10.17632/rh3fy75zdv.2
3. Sakib, Nazmus; Opu, Md. Tawhid Islam; Akter, Jarina; Islam, Md. Saiful; Shawon, Md. Ahsan-Ul Kabir; Anjum, Maisha; Adiba, Ara; Faruk, Tasnuva; Islam, Md Kafiul (2025), "Multi-channel Wireless EEG Recordings of Young Adults for Depression Screening based on PHQ-9", Mendeley Data, V1, doi: 10.17632/ct5vrc4k2t.1
4. Hasan Faiza, Tasfia; Hossain, Muhammad Sajid ; Islam , Samara ; Sakib , Nazmus ; Faruk , Tasnuva ; Islam, Md Kafiul (2025), "Raw Fetal PCG Contaminated With Mother's PCG", Mendeley Data, V1, doi: 10.17632/k5z7hf6vbb.1
5. Rafique, Sayem; Saif, Zawwad; Roja, Saima Tasfia; Islam, Kafiul (2025), "EEG MI-BCI Multidirectional Mouse Cursor Dataset", Mendeley Data, V2, doi: 10.17632/c92c2n5t34.2
6. Rafique, Sayem; Roja, Saima Tasfia; Rahman, Asikur; Sakib, Nazmus; Islam, Kafiul (2025), "EEG MI-BCI Mouse Cursor Dataset", Mendeley Data, V2, doi: 10.17632/zgtryg9wvg.2
7. Binte Ahmed, Sheikh Farhana; Sakib, Nazmus ; Islam, Md. Kafiul (2024), "Motion Artifact Contaminated Multichannel EEG Dataset", Mendeley Data, V2, doi: 10.17632/42pphfbcdk.2
8. Farhana, Fariha; Islam, Md. Kafiul; Amin, Md. Ruhul (2024), "MA contaminated EEG", Mendeley Data, V1, doi: 10.17632/fww5wg74g4.1

Full list of **publications** can be found here: <https://scholar.google.com/citations?user=PkkxL14AAAAJ&hl=en>

Full list of **research projects** can be found here: https://www.researchgate.net/profile/Md_Kafiul_Islam/projects

SOCIETY MEMBERSHIPS, REVIEW, EDITORIAL & VOLUNTARY ACTIVITIES

(A) Reviewer/TPC Member

1. Program Committee **Chair**, International Conference on Intelligent Systems, Technologies and Applications - Faculty of Medicine and Pharmacy, Agadir, Morocco - May 03-04, 2027.

2. Member of the Editorial Board for the Proceedings of the International Conference on Innovation, Excellence and Quality for Transformation in Higher Education 2026 (THE 2026).
3. Technical Program Co-Chair, International Conference on Innovation, Excellence and Quality for Transformation in Higher Education 2026 (THE 2026), organized by IQAC at IUB, 12-13 June, 2026.
4. Member of both Technical and Organizing Committee, 4th International Symposium on Quality Assurance in Engineering Education through Accreditation organized by BAETE, IEB, 8-9 Dec, 2025
5. IEEE WIECON ECE 2020, 2021, 2024
6. PEEIACON 2024, RUET.
7. 5th International Forum on Signal Processing (IFSP 2025), China.
8. VSIP 2024
9. ICISPC 2024 Japan
10. ICAEEE 2024 DUET
11. ICEEICT 2024 MIST
12. iACCESS 2024 ULAB
13. ICCAS 2024 China
14. ICBSP 2024 Hong Kong
15. 2024 International Conference on Circuit, Systems and Communication (ICCSC 2024), Morocco
16. 2023 International Conference on Data Mining, Computing and Software Engineering (DMCSE 2023), China
17. Scientific Reports (Nature Publishing Group) 2023
18. Research Project Grant Reviewer of Center for Research Innovation and Transformation (CRIT), Green University of Bangladesh (GUB)
19. EAI ICISML 2023
20. VSIP 2023
21. Member of International TPC, CSPIT, Singapore 2023
22. International Conference on Computer Systems and Communication Technology 2023
23. 2023 5th International Conference on Intelligent Science and Technology (ICIST) will be held during Sept. 23-25, 2023 at Lanzhou, China
24. Digital Health (SAGE)
25. International Journal of Sustainable Tropical Design Research and Practice
26. ICAEEE 2022 at DUET.
27. ICCIT 2022, 2024 at Cox's Bazar.
28. Concurrency and Computation: Practice & Experience
29. Mathematical Problems in Engineering
30. PeerJ
31. Frontiers in Neuroscience
32. Progress in Biomedical Engineering
33. Imaging Science Journal
34. PLOS Digital Health
35. IEEE Transactions on Human-Machine Systems
36. ICCAS at Singapore, 2022
37. International Conference on Trends in Computational and Cognitive Engineering (TCCE 2021)
38. 3rd International Conference on Electrical & Electronic Engineering (ICEEE 2021) at RUET, Rajshahi, Bangladesh
39. IEEE Bombay Section Signature Conference (IBSSC 2021)
40. 2022 International Conference on Computer Graphics, Image and Signal Processing (CGISP 2022)
41. Biomedical Engineering/Biomedizinische Technik
42. Journal of Physics D: Applied Physics, 2021
43. The International Conference on 4th Industrial Revolution and Beyond (IC4IR 2021)
44. International Conference on Intelligent Vehicles (ICoIV 2021)
45. International Conference on Electronics, Communications and Information Technology 2021 (ICECIT 2021)
46. 2021 International Conference on Bioengineering, Biomedical Signal and Image Processing. BIOMESIP-2021
47. ICST@BUBT 2021
48. Journal of Neural Engineering, 2021, 2022
49. International Conference on Automation, Control and Mechatronics for Industry 4.0 (ACMI 2021)
50. Current Medical Imaging, 2021
51. Asia-Pacific Conference on Robotics, Automation and Communication Engineering (RACE 2020 and 2021)
52. Informatics in Medicine Unlocked (Elsevier)
53. IEEE Transactions on. Neural Systems and Rehabilitation Engineering
54. Biomedical Physics & Engineering Express

55. STI at GUB, 2020, 2021, 2023, 2025
56. ICECE at BUET, 2020, 2022, 2024
57. Pattern Recognition Letters (Elsevier)
58. Frontiers in Computational Neuroscience
59. MWSCAS 2020
60. ICCCM 2020, 2021 in SG.
61. IEEE ICAICT 2020, UIU
62. IEEE TENSYP 2020, Dhaka
63. International Workshop on Computer Vision and Application (IWCVA), 2019 and 2021.
64. IEEE Conference on Biomedical Engineering, Computer and Information Technology for Health (IEEE BECITHCON 2019, 2021, 2024, 2025).
65. IEEE International Conference on Signal Processing, Information, Communication and Systems 2019 (IEEE SPICSCON 2019) and 2021
66. IEEE WIECON-ECE 2019, 2020 and 2021
67. CloudComp 2019 - 9th EAI International Conference on Cloud Computing, 2019 at Sydney, Australia
68. IET Journal of Signal Processing, Jun, 2019
69. The Journal of Engineering (IET), April, 2019
70. 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT-2019), EWU.
71. IEEE Journal of Biomedical and Health Informatics, 2019
72. IEEE International Conference on Computer and Communication Systems (ICCCS), 2019, 2020, and 2021
73. IEEE Reviews in Biomedical Engineering, 2018 - Present
74. IEEE International Symposium on Circuits and Systems (ISCAS 2017 and 2019)
75. International Conference on Robotics, Electrical and Signal Processing Techniques (ICREST), 2019, 2021, 2023, 2025
76. Engineering Science and Technology, an International Journal, 2018
77. IEEE Access, 2018, 2021, 2022
78. International Conference on Innovations in Science, Engineering and Technology (ICISSET 2018)
79. IEEE Biomedical Circuits and Systems Conference (BIOCAS 2018)
80. Journal of Integrative Neuroscience, 2018
81. The International Conference on Computer, Communication, Chemical, Material & Electronic Engineering, 2018
82. IEEE Region 10 Humanitarian Technology Conference 2017 (R10HTC)
83. Artificial Intelligence in Medicine, (2017 - Present)
84. IEEE Sensors
85. International Conference on Advances in Electrical Engineering (ICAEE), 2017 and 2019.
86. 9th International Conference on Electrical and Computer Engineering (ICECE 2016)
87. IEEE iCEEiCT 2016, 2018 and 2021, MIST, Dhaka
88. Biomedical Signal Processing and Control (Elsevier)
89. International Conference on Informatics, Electronics & Vision (ICIEV), 2016, 2018, and 2019
90. Journal of Neuroscience Methods (Elsevier)
91. XXV-th International Conference on Information, communication and automation technologies (ICAT 2015)
92. Heliyon (Elsevier's New Journal)
93. IEEE Transaction on Signal Processing (2015)
94. Biomedical Engineering Research (BER) Journal Published by World Academic Publishing
95. The 2nd International Conference on Biomedical Engineering and Biotechnology (iCBEB 2013)
96. MediTech 2016
97. International Conference on Micro-Electronics and Telecommunication Engineering (ICMETE), 2016 & 2019
98. WSEAS Journals

(B) Editorial Board Member/Guest Editor/Co-Editor

1. Editorial Board Member of EAI Endorsed Transactions on Intelligent Systems and Machine Learning Applications
2. Special Session Chair for "Biomedical Instrumentation and Signal Processing for Disease Diagnosis, Prognosis, and Treatment" session at the 13th International Conference on Communications, Circuits, and Systems (ICCCAS), May 10-12, 2024.
3. [Editorial Board Member](#) of the International Conference on Internet of Things and Applications.
4. Associate Editor, IEEE Access, Oct 2021-Present

5. Guest Associate Editor of a special issue of the journal Frontiers in Computational Neuroscience titled “Recent Advances in EEG (Non-invasive) Based BCI Applications”
6. Neuroscience International
7. Journal of Computer Networks and Communications: Special Issue on Information and Signal Processing Over Smart Grid, 2018
8. Biosensors and Bioelectronics Open Access (Journal)
9. International Journal of Applied Science Engineering and Technology (SETScholars @ WACAMLDs)
10. Asia Pacific Journal of Antennas, Signal Processing And Microelectronics Engineering
11. Biomedical Statistics and Informatics, SciencePG
12. Advanced Electrical and Electronics Engineering and Scientific Journal (AEEESJ)
13. World Scientific and Engineering Academy and Society (WSEAS): Special Issue for WSEAS Transaction on Systems (Biomedical)
14. International Journal of Neurology Research (ISSN 2313-5611)
15. International Journal of Neurology & Neuroscience
16. International Journal of Biomedical Science and Engineering (IJBSE), Science Publishing Group

Full list of review and editorial activities: <https://www.webofscience.com/wos/author/record/1484191>

(C) Professional Membership

IEEE, IEEE SPS and IEEE-EMBS <i>Senior Member (ID #90388389)</i>	2017 – 2018 (Member) Jan, 2019 – Present (Senior Member), USA
IUT Alumni Association <i>Lifetime Member</i>	April 2020 – Forever
VDGOOD Professional Association <i>Active Member</i>	July 2020 - Present
SCience and Engineering Institute (SCIEI) <i>Senior Member (ID # 20200323001)</i>	Mar 2020 – Present, Hong Kong
Asia Pacific Institute of Science and Engineering (APISE) <i>Member</i>	Jun 2019 - Present
Asia-Pacific Signal and Information Processing Association <i>Temporary Member (ID # M203411)</i>	Oct 2020 - Present Hong Kong
European Alliance for Innovation (EAI) <i>Member</i>	Dec 2020 – Present
IEEE-SPS and IEEE-CASS <i>Graduate Student Member</i>	June 2014 – Dec 2015 USA
Biomedical Engineering Society, BMES <i>Student Member</i>	May 2012 - Dec 2014 USA
The Institution of Engineers, Bangladesh (IEB)	(Associate Member A/11380) 2011 - 2024 (Member M/47978) 2025 - Present
Overseas Chapter of Institution of Engineers Bangladesh <i>Member</i>	Jan 2012 – Dec 2015 Singapore
Bangladesh Electronics Society <i>Member</i>	Jan 2010 - Dec 2010 Bangladesh
Bangladesh Solar Energy Society <i>General Member</i>	Dec 2010 - Dec 2011 Bangladesh
International Association of Computer Science & Information Technology <i>Member (ID #80334044)</i>	Jan 2010 – Present Singapore
International Association of Engineers (IAENG) <i>Member (ID 113674)</i>	Jan 2012 – Present
Biomedical Engineering Society (Singapore) <i>Graduate Student Member (ID #304)</i>	Aug 2011 – Jul 2012 Singapore

Universal Association of Computer & Electronics Engineers (UACEE) <i>Senior Member</i>	Mar 2016 - Present
The Institute of Doctors Engineers and Scientists – IDES <i>Invited Member</i>	May 2017 - Present

(D) Voluntary Associations and Other Activities

1. Served as a **Judge** at the FYDP Poster Exhibition and Competition by graduating students (Spring 2025) of Dept. of EEE, AUST.
2. Technical **Session Chair**, ECCT 2026, DIU.
3. Served as a **Resource person** during the Tier-2 Residential Training for Program Evaluators held at Hotel InterContinental Dhaka, during 19–21 November 2025.
4. Served as a **Resource person** for *Hands-on Activity* during the “Hands-on Orientation for Tier-1 Program Evaluators” organized by BAETE-IEB at ITN, BUET on 30 Aug, 2025.
5. Served as a **Resource person** for *Hands-on Activity* during the “Hands-on Orientation for Tier-1 Program Evaluators” organized by BAETE-IEB at ITN, BUET on 23 Aug, 2025.
6. **Taskforce Member** for Preparation of Evaluator Training Materials, BAETE, IEB, May 2025-Present.
7. **Advisor** of IEEE IUB IAS SBC, Mar 2025 – Jan 2026.
8. **Session Chair**, Technical Session: Brain Signal Processing, UCICS 2025, VU, Rajshahi.
9. Member of **International Advisory Committee** for International Conference on Advancement in Computation & Computer Technologies (InCACCT-2025), Chandigarh, India.
10. **Session Chair**, Technical Session: Industry and Applications track, PEEIACON 2024, RUET.
11. **Track Chair** of Biomedical Applications at PEEIACON 2024, RUET.
12. **Session Chair** and **Judge** for Poster Presentation and Best Poster Competition respectively at the 6th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT 2024), MIST.
13. **Session Chair** at the 3rd International Conference on Advancement in Electrical and Electronic Engineering – (ICAEET 2024), DUET. .
14. Served as one of the **Resource Persons** at the “Tier-2 Retreat for Program Evaluators” organized by BAETE-IEB on 1-3 May 2024.
15. Served as one of the **Resource Persons** at the “Hands-on Orientation for the Tier-1 Program Evaluators” organized by BAETE-IEB on 2-3 Mar 2024 and 9-10 Mar 2024.
16. **Coordinated** the complete application and accreditation process of BAETE including ET visit, revision and final submission for both B.Sc. in EEE program of the Dept. of EEE from beginning to end (Dec 2022-Dec 2023).
17. **Session Chair** at the 5th INTERNATIONAL CONFERENCE ON SUSTAINABLE TECHNOLOGIES FOR INDUSTRY 5.0, STI 2023, GUB.
18. **Mentor** of [Neuromatch Academy](#) in the area of *Computational Neuroscience*, 2023.
19. **Session Chair** at the EAI 2nd International Conference on Intelligent Systems and Machine Learning (EAI ICISML 2023), July 27-28, 2023, Cuttack, Odisha, India
20. **Session Chair** at the 2023 5th International Conference on Image, Video and Signal Processing (IVSP 2023), Singapore.
21. Represented EEE-IUB as an **Invited Guest** during the Seminar/Discussion on TRANSITIONING TOWARDS HI-TECH INDUSTRIALIZATION IN BANGLADESH organized by Metropolitan Chamber of Commerce and Industry (MCCI), Dhaka on 16 Feb, 2023.
22. **Session Chair** at the 3rd ICREST 2023, AIUB.
23. **Member of International Advisory Committee** for INTERNATIONAL CONFERENCE ON INTELLIGENT AND SMART COMPUTATION (ICIASC-2023)
24. **Session Chair** at the 4th INTERNATIONAL CONFERENCE ON SUSTAINABLE TECHNOLOGIES FOR INDUSTRY 4.0, STI 2022, GUB.
25. **Interviewed** by Biggani.org on Nov 18, 2022, as one of the Bangladeshi Scientists for inspiring the young generation who are potential future scientists.
26. Served as an **External Expert** for OBE Course Review Committee meeting at the Dept. of EEE, IUT.
27. **Coordinating** the preparation of the complete OBE curriculum process for BSc in EEE and BSc in ETE programs submitted to the UGC in Sep, 2022.
28. **Session Chair** at the 11th International Conference on Communications, Circuits and Systems (ICCCAS 2022). Singapore.

29. **Coordinated** the complete application and accreditation process of BAETE including ET visit, revision and final submission for both B.Sc. in EEE and ETE programs of the Dept. of EEE from beginning to end (June 2020-Dec 2021).
30. **Judge**, Interactive Poster Session at 3rd STI 4.0 at GUB, Dhaka, 2021
31. **Session Chair** at The International Conference on 4th Industrial Revolution and Beyond (IC4IR 2021) organized by UGC and ICT Ministry for the Technical Session "Data Analysis and Cloud Computing - 3".
32. **Session Chair** at IEEE WIECON ECE 2021 organized by IEEE BDS Co-Located Conference for the Technical Session "Image Processing and Computing Architecture".
33. Member of **International Advisory Committee** for International Conference on Advancement in Computation & Computer Technologies (ICACCT-2021)
34. **Session Chair** at ICSCCT 2021 organized by BUBU for the Technical Session "Biomedical Applications and Image Processing".
35. **Session Chair** at ACMI 2021 organized by RUET, Rajshahi for the Technical Session D1P1S4_ Signal Processing, AI and Machine Learning –II.
36. **Session Co-Chair** at ACMI 2021 organized by RUET, Rajshahi for the Invited Speech Session-II.
37. **Track Co-Chair** (Meta-Reviewer) at ACMI 2021 organized by RUET, Rajshahi.
38. **Team Leader** of B.Sc. in EEE program during OBE-based BAETE application preparation and submission in 2020.
39. **Session Chair**, 2nd ICREST 2020 at AIUB, Dhaka for technical session COMPUTING, AI, BIG DATA & NETWORKING
40. **Judge**, Interactive Poster Session at 2nd STI 4.0 at GUB, Dhaka, 2020
41. **Session Chair**, 2nd ICAICT at UIU, Dhaka 2020
42. **TPC Member**, STI 4.0 at GUB, 2020 and 2021
43. **Judge** for Best paper selection at 4th IVPR, 2020
44. **Judge** for Best paper selection at 2nd ABC, 2020
45. **Judge** for Best paper selection at 9th ICIEV, 2020
46. **Track Co-Chair**, ICAICT at UIU, 2020
47. **Lead Host** at Virtual Conference Management and Organizing Team (Room-2), IEEE TENSYP 2020.
48. **Session Chair**, IEEE TENSYP 2020
49. **Track Co-Chair**, IEEE TENSYP 2020
50. **Branch Counselor** of IEEE IUB SB, Feb 2020 – May 2023.
51. **Course Coordinator**, Dept. of EEE, IUB, Aug 2018 – Aug 2021.
52. Served as the **Publication Chair** at IEEE SPICSCON 2019.
53. Served as a **Session Chair** at IEEE SPICSCON 2019.
54. Served as a **Session Chair** at IEEE PEEIACON 2019.
55. Selected as a **Judge** for the Global Undergraduate Awards (Engineering category), 2019.
56. **Technical Program Committee Chair**, 5th International Conference on Advances in Electrical Engineering (ICAEE), to be held in 26-28 Sep, 2019 at IUB, Dhaka.
57. Served as a **Track Chair** for Biomedical Engineering Track during 5th ICAEE 2019.
58. Served as a **Notable Reviewer** (Reviewed at least 10 papers) for both Biomedical Engineering and Computer Vision & Signal Processing Tracks during 5th ICAEE 2019.
59. **Attended** a round-table discussion at EEE department of IUB as part of a Jamuna TV Program VOICE, broadcasted on April 30, 2019.
60. **Program Evaluator** for IEB-BAETE - Board of Accreditation for Engineering and Technical Education (BAETE) supported by The Institution of Engineers, Bangladesh (IEB), 2023- Present.
61. **Technical Secretary**, 4th International Conference on Advances in Electrical Engineering (ICAEE), 2017, IUB, Dhaka.
62. **Member Secretary**, ICT Expo 2016 (jointly Organized by ICT Division, BD Govt. and Bangladesh Computer Samity).
63. **Member of the Organizing Committee** of "12th International Conference on Computer and Information Technology 21~23 December, 2009, IUB, Dhaka".
64. **Organizer** of the seminar on "Brain Engineering" by SM Mahabub Alam, President, Brain Engineering Forum, at IUB where more than 200 audience attended the 3 hour long interactive seminar.
65. Served as a **Session Chair** in Bioengineering Track during ICREST 2019, at AIUB.
66. Served as a **Judge** in different national competitions, such as *IEEE SS12 Innovation Challenge and Maker Fair* 2018 at IUB, *EEE Day* 2018, 2019 at IUB, *IEEE Day* 2017 at IUB, *Maker's Mania* Project Competition, 2018 at IUB, Innovative Idea Contest during *Engenius'18* at AUST, 2018, *ESONANCE* Project Competition, Nov, 2018 held at IUT, and *MindSparks* in "Innovation Challenge" category held at AUST, 2019.
67. **Member** of the Examination Committee (**Internal Examiner**) for Six MSc. Theses; Two defended in Dec, 2017, Two defended in Aug, 2020 and Two defended in 2021 from Dept. of EEE, IUB.

(E) Certifications

1. Tier-2 Program Evaluator Retreat
Issuing authority: BAETE, IEB
Duration: 3 days; Issued Date: July, 2023
2. Tier-2 Program Evaluator Training
Issuing authority: BAETE, IEB
Duration: 1 day; Issued Date: June, 2023
3. Hands-on Orientations for New Program Evaluators
Issuing authority: BAETE, IEB
Duration: 2 days; Issued Date: May, 2022
4. CITI Certification: Basic Social Behavioral Research
Issuing authority: Collaborative Institutional Training Initiative
Duration: 1 week; Issued Date: 2019
5. Short Course on "Solar Photovoltaic (PV) Energy Technology"
Issuing authority: University of Dhaka (Institute of Energy)
Duration: 3 months (Jul-Nov 2010); Issued date: Aug 2010
6. Short Course on Programmable Logic Controller (PLC)
Issuing authority: Bangladesh Industrial Technical Assistance Centre (BITAC)
Duration: 1 month; Issued date: Aug 2010
7. Short Course on Telecommunication Systems: GSM and CDMA technology
Issuing authority: CSL Training
Duration: 1 month; Issued date: May 2009
8. Short Course on Microcontroller based Embedded System Design
Issuing authority: Pi Labs Bangladesh Ltd.
Duration: 1 month; Issued date: Oct 2006

REFERENCES

1. **Dr. Zhi Yang**, Associate Professor, Department of Biomedical Engineering, University of Minnesota 6-120, Nils Hasselmo Hall, 312 Church St SE, Minneapolis, MN 55455.
Tel: 612-626-1114 Email: yang5029@umn.edu
2. **Dr. Abdullah Al Mamun**, Associate Professor and Associate Head (Undergraduate Programmes) Dept. of Electrical and Computer Engineering, National University of Singapore
4 Engineering Drive 3, Block E4, #08-18, Singapore 117583
Tel: +65- 6516 2251 Email: eleam@nus.edu.sg
3. **Prof. M. Abdur Razzak**, Professor and former Head, Dept. of Electrical and Electronic Engineering, Independent University, Bangladesh, Plot-16, Block-B, Bashundhara R/A, Dhaka-1212.
Tel: + 880 9612 939393, Ext-2255 Email: razzak@iub.edu.bd
4. **Prof. Feroz Ahmed**, Professor and former Head, Dept. of Electrical and Electronic Engineering, Independent University, Bangladesh, Plot-16, Block-B, Bashundhara R/A, Dhaka-1212.
Tel: + 880 9612 939393, Ext-2254 Email: fahmed@iub.edu.bd