



Dr. Upasana Talukdar

Assistant Professor

PhD (Tezpur University)

Department of Computer Science &
Engineering

✉ upasana@iiitg.ac.in

Joined the Institute in February
2021

About

Hello, welcome to my home page. I am an Assistant Professor in the Department of CSE at Indian Institute of Information Technology, Guwahati. I joined IIITG in February, 2021. I had completed my Ph.D. from Tezpur University in Aug 2019. Prior to that, I received B.Tech in Information Technology in 2011 from North Eastern Hill University, India where I hold Institute's Gold Medal for Academic Excellence. I completed M.Tech in Information Technology from Tezpur University, India in 2013 where I was awarded the Institute Gold Medal for Academic Excellence. During my Ph.D., I was a visiting scholar at University of Essex, UK. I worked as an Assistant Professor in the Department of Data Science & Analytics at Central University of Rajasthan from October 2019 to 3rd February 2021.

Research Interests

Artificial Intelligence, Machine Learning, Brain-Computer Interface, Knowledge Representation.

Publication

Journal

- 1. U. Talukdar, S.M. Hazarika and John Q Gan., "Adaptation of Common Spatial Patterns based on Mental Fatigue for Motor-Imagery BCI", Biomedical Signal Processing and Control, 58, (2020), pages. 101829,
- 2. U. Talukdar, S.M. Hazarika and John Q Gan, "Adaptive feature extraction in EEG-based motor imagery BCI: tracking mental fatigue", Journal of Neural Engineering, 17(1), (2020), pages. 016020,
- 3. U. Talukdar, S.M. Hazarika and John Q Gan, "Motor Imagery and Mental Fatigue: inter-relationship and EEG based estimation", Journal of Computational Neuroscience, 46(1), (2019),
- 4. U. Talukdar, S.M. Hazarika and John Q Gan, "A Kernel Partial Least Square based Feature Selection Method", Pattern Recognition, 83, (2018), pages. 91-106,

Conference

- 1. G Anirudh and U. Talukdar, "An Experimental Analysis for Credit Card Fraud Detection With Imbalanced and Machine Learning Techniques", In 26th Annual International Conference on Advanced Computing and Communications (ADCOM 2020), (2020), (To be published in CCIS Proceedings, Springer) (Accepted and Presented)
- 2. U. Talukdar and D. Sougrakpam, "BrainTalk-An EEG Motor Imagery BCI for giving Non-Speaking People a Voice: A Position Paper", In Proceedings of International Conference on Computing and Communication Systems, (2020), I3CS (2020), Springer (Accepted and Presented)
- 3. U. Talukdar, S.M. Hazarika and John Q Gan, "Augmenting a Description Logic with Probability for Motion Patterns Within QSTR", In Smart Computing Paradigms: New Progresses and Challenges, (2020), pages. 157-167, Springer, Singapore.
- 4. U Talukdar and S.M. Hazarika, "Designing spatio-temporal filter using adaptive sliding window for single trial EEG based BCI.", In Proceedings of the Advances in Robotics (AIR, 2017), (2017), Indian Institute of Technology, Delhi, Article. 4, ACM
- 5. U Talukdar and S.M. Hazarika, "Estimation of Mental Fatigue During EEG Based Motor Imagery", In International Conference on Intelligent Human Computer Interaction (IHCI, 2016), Birla Institute of Technology, Pilani., (2016), pages. 122-132, Springer
- 6. U Talukdar, R Barua and S. M. Hazarika, "A description logic based QSTR framework for recognizing motion patterns from spatio-temporal data", In Recent Trends in Information Systems (ReTIS), 2015 IEEE 2nd International Conference, Jadavpur University., (2015), pages. 38-43, IEEE



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