

Publications

A. Publications based on thesis work

1. **A. Hazarika***, L. Dutta, M Barhakur, and M. Bhuyan, "A multi-view discriminant feature fusion based non-linear process assessment and diagnosis: application to medical diagnosis," *IEEE Instrum. Meas. Mag.*, vol. 99, pp. 1-9, 2018.
2. **A. Hazarika***, P. Barman, L. Dutta, C. Talukdar, A. Subasi and M. Bhuyan, "Real-time implementation of a multi-domain feature fusion model using inherently available large-volume sensor data," *IEEE Trans. Ind. Informat.*, 2019
3. **A. Hazarika***, L. Dutta, M. Barhakur, M. Bhuyan, and A. Subasi, "A supervised ensemble subspace learning model based on multi-view feature level fusion for classification of EMG signals," *IEEE Trans. human-compt. Interaction.*, 2019 (under review)
4. **A. Hazarika***, and M. Bhuyan, "Review on intelligent fault-Diagnosis Models In Industrial Applications: Challenges And New Direction Of Research," *IEEE Trans. Neural Netw. Learn. Syst.*, 2018 (Under review)
5. **A. Hazarika***, M. Barhakur, L. Dutta, and M. Bhuyan, "F-SVD based algorithm for variability and stability measurement of bio-signals, feature extraction and fusion for pattern recognition," *Biomed. Signal Proces. Control*, vol.47, pp. 26-40, 2019.
6. **A. Hazarika***, L. Dutta, M. Boro, M. Barhakur, and M. Bhuyan, "An automatic feature extraction and fusion model: application to electromyogram (EMG) signal classification," *Int. Journal of Multimedia Information Retrieval*, vol. 7(3), pp. 173-186, 2018.
7. **A. Hazarika*** *et al.*, "Discriminant feature level fusion based learning for automatic staging of EEG signals," *Healthcare Technology Let.*, vol. 5(6), pp. 226-230, 2018.
8. **A. Hazarika***, M Barhakur, L. Dutta, and M. Bhuyan, "Two-fold feature extraction technique for Biomedical signals classification," *proc. in conf. IEEE Inventive Computation Technol.*, India, 2016, pp.1-4.

9. **A. Hazarika***, M Barthakur, L. Dutta, and M. Bhuyan, "Noise-feature reduction and feature extraction technique for biomedical signal analysis," *proc. in conf. National recent Trends and Future prospects of computer Science and Electronics*, India, 2015, p. 21-22.
10. **A. Hazarika***, M Barthakur, L. Dutta, and M. Bhuyan, "Multi-view learning for classification of EMG template," *proc. in conf. IEEE Signal Proces. and Commun.*, India, 2016, pp. 467-471.
11. **A. Hazarika*** et al., "A Subspace Projection Based Feature Fusion: An Application to EEG Clustering," *proc. in conf. IEEE Recent Advances and Innovations in Eng.*, India, 2016, pp. 472-476.
12. **A. Hazarika***, M Barthakur, L. Dutta, and M. Bhuyan, "Fusion of projected feature for classification of EMG patterns," *proc. in conf. IEEE Recent Advances and Innovations in Eng.*, India, 2016, pp. 69-74.
13. **A. Hazarika*** et al. Discriminant Correlation-Based Information Fusion for Real-Time Biomedical Signal Clustering, *Advances in Communication, Devices and Networking*, Springer, Book chapter, pp. 465-474, 2018.
14. **A. Hazarika*** and M. Bhuyan, A Two-fold subspace learning based feature fusion strategy for Classification of EMG and EMG spectrogram images. *In Biologically Rationalized Computing Techniques For Image Processing Applications*, Vol. 25, pages 57-84, Springer, Cham., Book chapter 2016.
15. **A. Hazarika*** and M. Bhuyan, A feature fusion based discriminant learning model For diagnosis Of neuromuscular disorders using single channel needle EMG signal. *Intelligent data analysis for biomedical applications: Challenge and Solutions* Elsevier, Book chapter, 2018 (press).
16. **A. Hazarika*** and M. Bhuyan, Real-time implementation of feature level fusion based data-driven model for nonlinear process diagnosis. *Computer method and biomedicine*, Elsevier, Book chapter, 2018 (Accepted).

B. Co-author publications

17. **L. Dutta***, C. Talukdar, A. Hazarika and M. Bhuyan, "A Novel Low-Cost Hand-Held Tea Flavor Estimation System," *IEEE Trans. Ind. Electron*, vol. 65, No. 1, pp. 4983-4990, 2018.
18. **L. Dutta***, A. Hazarika and M. Bhuyan, "Direct interfacing circuit-based e-nose for gas classification and its uncertainty estimation," *IET Circuits, Devices Systems*, vol. 12, no. 1, pp. 63-72, 2017.

19. **L. Dutta***, A. Hazarika and M. Bhuyan, "Nonlinearity compensation of DIC-based multi-sensor measurement, " *Measurement*, vol. 126, pp. 13-21, 2018.
20. **L. Dutta***, A. Hazarika and M. Bhuyan, "Comparison of direct interfacing and ADC based system for gas identification using E-Nose," *IEEE conf. in accessibility to digital world.*, India, 2016, pp. 415-19
21. **L. Dutta***, A. Hazarika and M. Bhuyan, Nonlinear Offset Measurement and Nullification for Effective Resistive Sensor Design. *In Advances in Communication, Devices and Networking*, pp. 789-796. Springer, Singapore, 2018
23. **L. Dutta***, A. Hazarika and M. Bhuyan. Microcontroller Based E-Nose for Gas Classification without Using ADC. *Sensors Transducers*, vol. 202, no. 7, pp. 38-45, July 2016
23. **C. Talukdar***, A. Hazarika, A. Singh, M.Barthakur, and M. Bhuyan, "Voltage Controlled Stimulator For Nerve Conduction Study," *IEEE conf. in innovations in Electronics, Signal Processing and Communication.*, India, 2019.
24. **C. Talukdar***, A. Hazarika, A. singh, N. Das, L. Dutta, M. Barthakur, and M. Bhuyan, "A Biofeedback Based Auto-controlled Neurostimulator Design For Proper NCS Signal Acquisition and Measurement," *IET Science, Measurement Technology*, 2019 (Under Review).