

## **List of Publications by Dr. A.S. Muthanantha Murugavel**

### **Book Chapter:**

1. A. S. Muthanantha Murugavel, S. Ramakrishnan, "Review of Feature Extraction and Classification Techniques for epileptic seizure detection", Image Recognition: Progress, Trends and Challenges, (ISBN 978-1-53617-258-4), Nova Science publishers, USA, December 2019.

### **International Journals:**

1. S.Ramakrishnan and A.S.Muthanantha Murugavel, "Epileptic seizure detection using fuzzy-rules-based sub-band specific features and layered multi-class SVM", Pattern Analysis and Applications, **Springer**, ISSN: 1433-7541, Vol.22, No.3, pp.1161-1176, Aug 2019. (Impact Factor: 1.410).
2. Mohammad J. Arif, Ramakrishnan S, Ibrahim M. M. El Emary, Hassan A. Alsuraihi, Muthanantha Murugavel A S, Oct 2017. "Classification of Epileptic EEG Signals using Wavelet-EMD-Domain Features and Improved Multi-class SVM", Journal of Engineering Technology (ISSN 0747-9964) Volume 6, Special Issue on Technology Innovations and Applications, pp. 423-440.
3. A. S. Muthanantha Murugavel, S. Ramakrishnan, "Hierarchical multi-class SVM with ELM kernel for epileptic EEG signal classification", Medical & Biological Engineering & Computing, **Springer**, DOI: 10.1007/s11517-015-1351-2, ISSN: 0140-0118, Vol. 54, No. 1, pp. 149-161, Jan 2016.
4. A.S. Muthanantha Murugavel, S. Ramakrishnan, "An Optimized Extreme Learning Machine for Epileptic Seizure Detection", IAENG International Journal of Computer Science, ISSN: 1819-9224, Vol. 41, No. 4, pp. 212-221, Nov 2014.
5. A.S. Muthanantha Murugavel, S. Ramakrishnan, M. Dhamodharaan, K. Deepak Manavalan "Multimodal System To Predict Epileptic Seizures Using Machine Learning Technique", International Journal of Soft Computing and Artificial Intelligence, ISSN: 2321-404X, Vol.2, No. 1, pp. 67 - 72, May 2014.
6. A.S. Muthanantha Murugavel, S. Ramakrishnan,"An Improved Detection of Epilepsy EEG Using Multi-Wavelet Transform and Modified Effective Extreme Learning Machine", Asian Journal of Information Technology, ISSN: 1682-3915, Vol.13, No. 10, pp. 639-645, Oct 2014.
7. A.S. Muthanantha Murugavel, S. Ramakrishnan, "Tree Based Wavelet Transform and DAG SVM for Seizure Detection", Signal & Image Processing: An International Journal (SIPIJ), ISSN: 2229-3922, Vol.3, No.1, pp. 115 - 125, Feb 2012.

8. A.S. Muthanantha Murugavel, S. Ramakrishnan, "Multi-Class SVM for EEG Signal Classification Using Wavelet Based Approximate Entropy", Proceedings of Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering (LNICST), Springer, ISSN: 1867-8211, ISBN: 978-3-642-27308-7, pp. 335-344, Jan 2012.

### International Conferences:

1. S.Ramakrishnan, A.S.Muthanantha Murugavel and P.Saravanan, "Wireless System for Epileptic Seizure Detection and Patient Monitoring using Bio-sensors", **Springer** Innovations in Communications and Computing Book Series, International Conference on Biosignals, Images and Instrumentation - ICBSII 2019, SSN College of Engineering, Chennai, 14-15 Mar 2019.
2. S.Ramakrishnan, A.S.Muthanantha Murugavel and P.Saravanan, "Epileptic EEG Signal Classification using Multi-class Convolutional Neural Network", Proceedings of **IEEE** International Conference on Vision Towards Emerging Trends in Communication and Networking - ViTECoN 2019, Vellore Institute of Technology, Vellore, India, 30-31 Mar 2019.
3. A.S.Muthanantha Murugavel, S.Ramakrishnan, J.Mohammed Shakil, S.Sudharsan, "Continuous Assessment of Epileptic Seizures with Wrist-worn Biosensors", Proceedings of International Conference on Engineering Applications (ICEA 2013), pp. 46-49, pp.799-814, 3 Apr 2013, Sardar Raja College of Engineering, Tirunelveli, Tamilnadu, India.
4. A.S.Muthanantha Murugavel, S.Ramakrishnan, B.Nivethitha, T. Sumithra, "Optimizing Multi-class SVM Using PSO For Epileptic EEG Classification", Proceedings of International Conference on Advanced Computing, Machines and Embedded Technology (ICACT 2013), pp.799-814, 8-9 Feb 2013, JKK Nattraja College of Engineering and Technology, Komarapalayam, Tamilnadu, India. ISBN: 978-93-80757-74-2.
5. Muthanantha Murugavel, A.S. ; Ramakrishnan, S. ; Maheswari, U. ; Sabetha, B.S., "Combined Seizure Index with Adaptive Multi-Class SVM for epileptic EEG classification", Proceedings of **IEEE** International Conference on Emerging Trends in VLSI, Embedded System, Nano Electronics and Telecommunication System (ICEVENT 2013), pp.1-5, 7-9 Jan 2013, SKP Engineering College, Tiruvannamalai, Tamilnadu, India. ISBN: 978-1-4673-5300-7, DOI: 10.1109/ICEVENT.2013.6496565.
6. Muthanantha Murugavel A.S., Ramakrishnan S., Balasamy K., Gopalakrishnan T., "Lyapunov Features based EEG Signal Classification By Multi-Class SVM", Proceedings of **IEEE** 2011 World Congress on Information and Communication Technologies (WICT 2011), pp.197-201, 11-14 Dec 2011, University of Mumbai, Mumbai, India. ISBN: 978-1-4673-0125-1, IEEE Catalog Number: CFP1168R-CDR.
7. Gopalakrishnan T., Ramakrishnan S., Balasamy K., Muthanantha Murugavel A.S., "Semi Fragile Watermarking Using Gaussian Mixture Model For Malicious Image Attacks", Proceedings of **IEEE** 2011 World Congress on Information and Communication Technologies (WICT 2011), pp.120-125, 11-14 Dec 2011, University of Mumbai, Mumbai, India. ISBN: 978-1-4673-0125-1, IEEE Catalog Number: CFP1168R-CDR.

8. A.S. Muthanantha Murugavel, Dr.S.Ramakrishnan, G.Vaishnavi, R.Sakthi Sree Keerthana, "An Optimized Extreme Learning Machine for Seizure Detection", Proceeding of International Conference on Futuristic of Computer Science Engineering & Information Technology (ICCT 2012), pp. 44-50, pp.44-50, Vol.4, Jan 28 - 29, 2012, Thiruvalluvar College of Engineering and Technology, Vandavasi, Tamilnadu, India.
9. Muthanantha Murugavel A.S., Ramakrishnan S., "Wavelet Domain Approximate Entropy-Based Epileptic Seizure Detection", Proceedings of the 5th International Conference on Information Technology (ICIT 2011), 11 – 13 May 2011, Al-Zaytoonah University, Amman, Jordan.
10. Muthanantha Murugavel A.S., Ramakrishnan S., Hari Prasath R.K., and Ezhilarasu T, "Detection of Epilepsy using Local Discriminant Bases Wavelet Packet Decomposition and Multi-Class SVM", Proceedings of the International Conference on Engineering, Science and Technology (ICEST 2011), 7 – 8 April 2011, Dhanalakshmi Srinivasan Engineering College, Perambalur.
11. Muthanantha Murugavel A.S. and Ramakrishnan S., "Classification of EEG Signals Using Weighted Probabilistic Neural Network and Multiwavelet Transformation", Proceedings of the International Conference on Operation Research applications in Engineering and Management, pp.41-48, 27-29 May 2009, Anna University, Tiruchirapalli, India.
12. A.S. Muthanantha Murugavel, A.Rathinavelu and G.Anupriya, "Speech Recognition Model for Tamil Stops", Proceedings of the International Conference on Computational Intelligence and Intelligent Systems, 2- 4 July 2007, London.

**National Conferences:**

1. Muthanatha Murugavel.A.S., Hariprasath R.K., Ezhilarasu A., Ramakrishnan S., "Detection Epilepsy Using Local Discriminant Bases Wavelet Packet Decomposition", Proceedings of the 4th National Conference on Recent Advances in Computer Vision and Information Technology, pp.295-300, 7 March 2011, Government College of Technology, Coimbatore.
2. A.S. Muthanantha Murugavel, R.Arunadevi, S.Divyashri, P.Indusha, "Supervised Feature Projection Based Classification Method for EMG Signal Classification", proceedings on National Conference on Recent trends and Advances in Information Technology, March 5, 2011, K.S.Rangasamy College of Technology, Tiruchengode.
3. S.Ramakrishnan, and A.S.Muthanantha Murugavel, "Classification of Epileptic EEG Signals Using Probabilistic Neural Network and Wavelet Transformation", Proceedings of the National Workshop on Intelligent Data Analytics & Image Processing, 8-9 Jan 2010, Bannariamman Institute of Technology, Sathy.
4. A.S.Muthanantha Murugavel, S.Kowsalyadevi, "Tamil Phonemes Recognition using Neural Networks", Proceedings of the National Conference on Advances in Computer Engineering and Networking, 15 March 2008, P.S.N.A. College of Engineering and Technology, Dindigul.
5. A.S.Muthanantha Murugavel, "Visual Feedback for Speech User Interface", Proceedings of the National Conference on Soft Computing", 17-18 Nov 2006, Hindusthan College of Engineering and Technology, Coimbatore.