

Dr. KAMALRAJ SUBRAMANIAM



WORK EXPERIENCE

Total Experience: 9 Years

Associate Professor: 4 Years 1 Month, KAHE, India

Oct 2014 to Till Date

Graduate Research Assistant: 3 Years 9 Months, Universiti of Malaysia, Malaysia

Jan 2011 – Sep 2014

Assistant Professor: 1 Years 6 Months, Karpagam Institute of Technology, India

July 2009 - Dec 2010

JOURNALS

1. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yacob, Abdul Hamid Bin Adom, Hema C R, "**EEG Based Detection of Conductive and Sensorineural Hearing loss using Artificial Neural Networks**," *Journal of Next generation Information Technology*, Vol 4, Issue 3, pp. 204-212, 2013, South Korea. [ISSN: 2092-8637]
2. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yacob, Abdul Hamid Bin Adom, Hema C R, "**Effect of Auditory Evoked Potential Response in Hearing Loss: A Review**", *Journal Of open biomedical Engineering*, Vol 8, 1-9, 2014. [ISSN: 1874-1207] **[SCI, IF: 0.9]**
3. Paulraj M P, Kamalraj Subramaniam, Hema C R, "**Classification of Hearing perception level using Auditory evoked potentials**, *Jurnal Teknologi*, Vol 77:28, pp.73-78,2015
4. Shanthi, Kamalraj S "**Design of low complexity Fault Tolerant Parallel FFTS using partial summation**" *International journal of applied engineering research*, Vol 4, pp.2955-2960,2016
5. Infant Augustine, Kamalraj Subramaniam "**LPG consumption, monitoring and Booking system** " *International journal of applied engineering research*, Vol 4, pp.3993-3998,2016
6. Sampath, Muthuraman Ramaswamy, Kamalraj Subramaniam, "**Smart Supervisory Control for Optimized Power Management System of hybrid Micro-Grid**", *International journal of applied engineering research*, Vol 11, pp.3980-3986,2016
7. Ashwathappa.P, Kamalraj Subramaniam, "**Temporal Predictability Based Blind Source Separation– An Approach For Denoising EEG Signal**, *Advances in natural and applied sciences*, Vol 10, pp.15-20, 2016
8. Kamalraj Subramaniam, Sridhar, Paulraj MP" **Evoked Potentials Based Detection of Hearing Threshold Using PSO Neural Network**, *Pakistan Journal of Biotechnology*, Vol 13, pp.357-361,2016
9. Roshini, Kamalraj Subramaniam, **Magnetic Resonance Imaging: A systematic Review**, *Pakistan Journal of Biotechnology*, Vol 154, pp 7, 2016
10. M. Ashwin, S. Kamalraj, Mubarakali Azath, **Weighted Clustering Trust Model for Mobile Ad Hoc Networks**, *Wireless Personal Communication*, Vol 94, pp.2203–2212, 2017 **[SCI, IF: 2]**
11. MS. Gowtham, Kamalraj Subramaniam, **Power Aware Cross Layer Approach in Manets Using Advanced Congestion**

- Control Approach**, *Special Issue 18-Special Issue*, Vol 9, pp.1600-1615, 2017 [SCI, IF:1.6]
12. Nisheena V Iqbal, Kamalraj Subramaniam, **A Review on Upper-Limb Myoelectric Prosthetic Control**, *IETE Journal of Research* pp.1-13, 2017 [SCI, IF:1.15]
 13. N Thamaraikannan, Kamalraj Subramaniam, **Improving Performance of MANET Using Optimized Energy Efficient Adaptive Weighted Clustering Protocol**, *Special Issue 13-Special Issue*, Vol 9, pp.618-624, 2017
 14. Kamalraj Subramaniam Renjith V Ravi, **Image Compression and Encryption using Optimized Wavelet Filter Bank and Chaotic Algorithm**, *International Journal of Applied Engineering Research (IJAER)*, Vol 12, pp.10595-10610, 2017
 15. M Ashwin, S Kamalraj, M Azath, **Multi objective trust optimization for efficient communication in wireless M learning applications**, *Cluster Computing*, Springer US, pp.1-9, 2017 [SCI, IF:1.6]
 16. Kamalraj S, Ashwin, **Clustering with Trust optimization in Manet - A Survey**, *Journal of advanced research in dynamical and control system, JARDCS*, Vol 9, pp.1318 – 1333, 2017
 17. Kamalraj Subramaniam, Renjith V Ravi, **Optimized wavelet filters and modified Huffman Encoding based Compression and Chaotic encryption for Image data**, *International Journal of Applied Engineering Research*, Research India Publication, Vol 12, pp.3961 – 3977, 2017
 18. BS Divya, Kamalraj Subramaniam, HR Nanjundaswamy, **Human epithelial type-2 cell categorization using hybrid descriptor with binary tree**, *Journal of Ambient Intelligence and Humanized Computing*, pp.1-8, 2018 [SCI, IF:1.5]
 19. MS Gowtham, Kamalraj Subramaniam, **Congestion control and packet recovery for cross layer approach in MANET**, *Cluster Computing*, pp.1-8, 2018 [SCI, IF: 1.6]
 20. Kamalraj Subramaniam, Nisheena V Iqbal, **Classification of Fractal features of Uterine EMG Signal for the Prediction of Preterm Birth**, *Biomedical and Pharmacology Journal*, pp. 369-374, 2018
 21. Nisheena V Iqbal, Kamalraj Subramaniam, **Wavelet Packet Entropy Based Control of Myoelectric Prosthesis**, *Biomedical and Pharmacology Journal*, pp. 375-380, 2018
 22. Kamalraj Subramaniam, Nisheena V Iqbal, **A review of significant researches on prediction of preterm birth using uterine electromyogram signal**, *Future Generation Computer Systems*, 2018. [SCI, IF: 4.9]
 23. Lakshmi R Nair, Kamalraj Subramaniam, **An Effective Image Retrieval System Using Color, Luminance, Texture with Shape Invariants Features**, *Special Issue 11-Special Issue*, pp. 1030-1047, 2018.
 24. P Shaniba Asmi, Kamalraj Subramaniam, Nisheena V Iqbal, **Entropy Based Feature Extraction of Electrohysterogram Signal for the Prediction of Preterm Birth**. *Indian Journal of Public Health Research & Development*, Vol 9, 2018
 25. Nisheena V Iqbal, Kamalraj Subramaniam, P Shaniba Asmi, **Effective Control of Upper Limb Myoelectric Prosthesis**, *Indian Journal of Public Health Research & Development*, Vol9, 2018.
 26. KN Rejith, Kamalraj Subramaniam, **Classification of Emotional States in Parkinson's Disease Patients using Machine Learning Algorithms**, *Biomedical and Pharmacology Journal*, pp. 333-341, 2018.
 27. KN Rejith, Kamalraj Subramaniam, **Analysis of emotional states in parkinson's disease using entropy, Energy-Entropy and teager Energy-Entropy features**, *Indian Journal of Public Health Research & Development*, pp. 1093-1098, 2018.
 28. Balamanigandan Ramachandran, Kamalraj Subramaniam, **Secure and efficient data forwarding in untrusted cloud environment**, *Cluster Computing*, pp. 1-9, 2018. [SCI, IF: 1.6]
 29. BS Divya, Kamalraj Subramaniam, HR Nanjundaswamy, **Human Epithelial Type-2 Cell Image Classification Using an Artificial Neural Network with Hybrid Descriptors**, *IETE Journal of Research* pp.1-13, 2018 [SCI, IF:1.5]
 30. J Wilson, Kamalraj Subramaniam, **Improved multi objective data transmission using conventional route selection algorithm in mobile ad hoc network**, *Peer-to-Peer Networking and Applications*, DOI:10.1007/s12652-019-01237-x, 2019. [SCI, IF: 1.8]
 31. M Ashwin, S Kamalraj, M Azath, **Multi objective trust optimization for efficient communication in wireless M learning applications**, *Cluster Computing*, 2019, [SCI, IF: 2.0]
 32. Nisheena V Iqbal, Kamalraj Subramaniam, **Robust feature sets for contraction level invariant control of upper limb**

33. Balamanigandan Ramachandran, Kamalraj Subramaniam, **Secure and efficient data forwarding in untrusted cloud environment**, Cluster Computing, 2019.
34. Priyanka Parvathy, Kamalraj Subramaniam, **Rapid speedup segment analysis based feature extraction for hand gesture recognition**, Multimedia Tools and Applications, 2019.
35. N Thamaraikannan, S Kamalraj, **Utilization of compact genetic algorithm for optimal shortest path selection to improve the throughput in mobile Ad-Hoc networks**, Cluster Computing, DOI:10.1007/s11042-019-7528-1, 2019.
36. Lakshmi R Nair, Kamalraj Subramaniam, GKD Prasanna Venkatesan, **An effective image retrieval system using machine learning and fuzzy c-means clustering approach**, IEEE Transactions on Consumer Electronics, ISSN:2249 – 8958, 2019.
37. A. Mohanarathinam, Kamalraj Subramaniam, Prakash NB, Hemalakshmi GR, G.K.D.Prasanna Venkatesan, **An Image Based Encryption Algorithm for Multimedia Applications**, IEEE Transactions on Consumer Electronics, ISSN:2249 – 8958, 2019.
38. Renjith V Ravi, Kamalraj Subramaniam, TV Roshini, Sundar Prakash Balaji Muthusamy, GKD Prasanna Venkatesan, **Optimization algorithms, an effective tool for the design of digital filters; a review**, Journal of Ambient Intelligence and Humanized Computing, 2019.
39. P Shaniba Asmi, Kamalraj Subramaniam, Nisheena V Iqbal, **Classification of Nonlinear Features of Uterine Electromyogram Signal Towards the Prediction of Preterm Birth**, IETE Journal of Research, 2019.
40. Dr.Kamalraj subramaniam, **Image compression using optimized wavelet filter derived from grey wolf algorithm**, Journal of Ambient Intelligence and Humanized Computing, 2020.
41. Dr.Kamalraj subramaniam, **Synergic deep learning based preoperative metric prediction and patient oriented payment model for total hip arthroplasty**, Journal of Ambient Intelligence and Humanized Computing, 2020.
42. Dr.Kamalraj subramaniam, **Adaptive Gaussian notch filter for removing periodic noise from digital images**, IET Digital Library, 2020.
43. Dr.Kamalraj subramaniam, **High-Speed Modified DA Architecture for DWT Computation in Secure Image Encoding**, Advances in Electrical and Computer Technologies, 2020.
44. Dr.Kamalraj subramaniam, **A Bi-spectrum Analysis of Uterine Electromyogram Signal Towards the Prediction of Preterm Birth**, Recent Trends and Advances in Artificial Intelligence and Internet of Things, 2020.



SCI- Scopus Citation Index, IF – Impact factor (Thomson Reuters)

CONFERENCES

1. Paulraj M P, Sazali Bin Yacob, Abdul Hamid Bin Adom, Kamalraj Subramaniam, Hema C R, **“EEG Based Hearing Threshold Determination Using Artificial Neural Networks”** *Proceeding of the IEEE Conference on Sustainable Utilization and Development In Engineering and Technology*, pp. 6-9, 2012, Kuala Lumpur, Malaysia.
2. Paulraj M P, Sazali Bin Yacob, Abdul Hamid Bin Adom, Kamalraj Subramaniam, Hema C R, **“EEG Based Hearing Perception Level Estimation For Normal Hearing Persons**, *Proceeding of the IEEE Conference on Control, Systems and Industrial Information*, pp. 160-162, 2012, Bandung, Indonesia.
3. Paulraj M P, Sazali Bin Yacob, Abdul Hamid Bin Adom, Kamalraj Subramaniam, Hema C R **“EEG Based Estimation Of Hearing Frequency Perception by Artificial Neural Networks”** *Proceeding of the IEEE EMBS conference on Bio-medical Engineering and Sciences*, pp. 673-676, 2012, Langkawi, Malaysia.
4. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yacob, Abdul Hamid Bin Adom, Hema C R, **“EEG Based Hearing Threshold Classification Using Fractal Features and Neural Network,”** *Proceedings of the IEEE Student Conference on Research and Development*, pp. 68-71, 2012, Penang, Malaysia.
5. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yacob, Abdul Hamid Bin Adom, Hema C R, **“Application Specific**

- Multichannel EEG Data Acquisition System For Portable Biomedical Application,"** *Proceedings of the Conference on MUCET*, pp.15-28, 2012, Perlis, Malaysia.
6. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yaccob, Abdul Hamid Bin Adom, Hema C R, **"EEG Based Hearing Frequency Perception Using Spectral Features and ANN"** *International Conference on Computing Systems*, pp. 44-47, 2013, Tamil Nadu, India, CD-ROM Proceedings.
 7. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yaccob, Abdul Hamid Bin Adom, Hema **"EEG Based Hearing Threshold Diagnosis Using Feed-Forward Network,"** *Proceedings of IEEE Conference On Intelligent Systems and Control*, pp.197-200, 2013, Tamil Nadu, India.
 8. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yaccob, Abdul Hamid Bin Adom, Hema C R, **"EEG Based Hearing Perception Level Classification using Fractal Features"**, *International IEEE Conference on Advanced Computing and Communicating Systems*, pp.1-4, 2014 Tamil Nadu, India.
 9. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yaccob, Abdul Hamid Bin Adom, Hema C R, **"A Machine Learning Approach For Distinguishing Hearing Perception Level Using Auditory Evoked Potentials"**, *IEEE EMBS conference on Bio-medical Engineering Sciences*, pp. 991-996 Malaysia.
 10. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yaccob, Abdul Hamid Bin Adom, Hema C R, **"AEP based detection of hearing loss: A prototype system"**, *IEEE 5th control and system graduate research colloquium* , pp.164-169, 2014 , Shahalam, Malaysia.
 11. Kamalraj Subramaniam, Paulraj M P. Divya , **"EEG Based Hearing States Detection Using AR Modeling Techniques"**, *IEEE EMBS conference on Biomedical Engineering and Sciences*, pp.513-521, 2016, Malaysia.
 12. Divya, Kamalraj Subramaniam, HR Nanjundaswamy, **"Hep2 Cell Classification Using Binary Decision Tree Approach"**, *IEEE EMBS conference on Biomedical Engineering and Sciences*, pp.507-512, 2016, Malaysia.
 13. Anoop Jose Chittilappilly, Kamalraj Subramaniam, **SVM based defect detection for industrial applications**, *Advanced Computing and Communication Systems (ICACCS), 2017 4th International Conference*, pp.1-5,2017
 14. S. Jayakumar, J. Poongkothai, G. K. D. Prasanna Venkatesan, P. Sakthivel, and Kamalraj Subramaniam, **"Thermal plasma processing of spherical ZnO nano powders"**, *API Conference Proceedings*, 2019.
 15. V. Linga Bharath, K.Surya, P. Varatharajan, G.K.D Prasanna Venkatesan, Kamalraj Subramaniam, **ESP Module Based Student Attendance Automation System, International Conference on Sustainable Communication Networks and Application**, 2019.

BOOK CHAPTER

1. Paulraj M P, Kamalraj Subramaniam, Sazali Bin Yaccob, Abdul Hamid Bin Adom, Hema C R **"Classification Of Hearing Perception Level Using Spectral Energy Entropy,"** *Emerging Trends In Engineering Research, Bonfring Intellectual Integrity*, pp. 26-30, 2013, India. [ISBN: 978-93-82338-32-1]
 2. P. Sakthivel, G. K. D. Prasanna Venkatesan, Kamalraj Subramaniam, and S. Jayakumar, **"Structural and optical properties of Zn_{0.98}Ti_{0.02}S (T=Mn, Cu, Ni, Co, Cr, Cd & Sn) quantum dots: A comparative study"**, *API Conference Proceedings*, 2019.
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3. Kamalraj Subramaniam, P. Shaniba Asmi, Nisheena V. Iqbal, "A Bi-spectrum Analysis of Uterine Electromyogram Signal Towards the Prediction of Preterm Birth", *Recent Trends and Advances in Artificial Intelligence and Internet of Things*, Springer, 2019.
4. K. Gokul, J. Srikanth, G. Inbarasu, Kamalraj Subramaniyan, G.K.D. Prasanna Venkatesan, "**Internet of Things Based Air Pollution Monitoring and Forecasting System**", *International Conference on Sustainable Communication Networks and Application*, 2019.