## **List of Publications**

- 1.M. Muthulakshmi and G. Kavitha, "An integrated multi-objective whale optimized support vector machine and local texture feature model for severity prediction in subjects with cardiovascular disorder", International Journal of Computer Assisted Radiology and Surgery, published by Springer. (2020).
- 2. Latha M and Kavitha G., "Assessment of severity in neuropsychiatric disorders based on radiomic features with prior shape level set and metaheuristic algorithms", Int Journal of Imaging Systems and Technology, published by Wiley. pp. 1-12 (2019).
- 3. Thamil Selvi, J., Kavitha, G. and Sujatha, "Fourth order diffusion model based edge map extraction of infrared breast images", Journal of Computational Methods in Sciences and Engineering, published by IOS Press. Vol. 19, Issue 5, pp. pp.1-8 (2018).
- 4. Latha M and Kavitha G, "Hermite transform and support vector machine based analysis of schizophrenia disorder in magnetic resonance brain images", Journal of Biomedical Engineering and Technology, published by Inderscience. Vol. 27, Issue 3, pp. 203-220 (2018).
- 5. J.Thamil Selvi, Ganesan Kavitha and C.Manoharan Sujatha, "An approach to extract edge maps in infrared based breast images using Perona- MALIK diffusion filter", International Journal of Biomedical Engineering and Technology, published by Inderscience. Vol. 28, Issue 3, pp. 261 272 (2018).
- 6. Latha. M and Kavitha. G, "Detection of Schizophrenia in brain MR images based on segmented ventricle region and Deep Belief Networks", Neural Computing and Applications, published by Springer. (2018).
- 7. Latha. M and Kavitha. G, "Diagnosis of Schizophrenia disorder in MR brain images using multi-objective BPSO based feature selection with fuzzy SVM", Journal of Medical and Biological Engineering,, published by Springer. (2017).
- 8. Manohar Latha and Ganesan Kavitha, "Segmentation and texture analysis of structural biomarkers using neighborhood clustering based level set in MRI of the schizophrenic brain", Magnetic Resonance Materials in Physics, Biology and Medicine, published by Springer. Vol. 30, Issue 2, (2017).
- 9. J. Sivagamasundari, G.Kavitha, V.Natarajan, and S.Ramakrishnan, "An approach to content based retinal image retrieval using Papamarkos multilevel thresholding method", Journal of Medical Imaging and Health Informatics, published by American Scientific Publishers. Vol. 5, Issue 3, (2015).
- 10. Kayalvizhi M, Kavitha G, Sujatha CM, Ramakrishnan S, "Study of Alzheimer's Disease Progression In MR Brain Images based on Segmentation and Analysis of Ventricles using Modified DRLSE Method and Minkowski Functionals", Biomedical Sciences Instrumentation, Vol. 51, pp. 332-40 (2015).

- 11. S.Rajeswari, G. Kavitha and M. Latha, "Severity detection in glaucoma affected retinal images using adaptive level set segmentation", International Journal of Applied Engineering Research, published by Research India Publications. Vol. 10, Issue 5, pp. 4830-4833 (2015).
- 12. Jac Fredo A.R, Kavitha. G and Ramakrishnan. S, "Segmentation and analysis of corpus callosum in autistic MR brain images using reaction diffusion level sets", Journal of Medical Imaging and Health Informatics, published by American Scientific Publishers. Vol. 5, Issue 4, pp. 737-74 (2015).
- 13. Kayalvizhi, M, K.R.Anandh, Kavitha, G, Sujatha, C M & Ramakrishnan, S, "Analysis of anatomical regions in Alzheimer's brain MR images using level sets and Minkowski functional", Journal of Mechanics in Medicine and Biology, published by World Scientific publishers. Vol. 15, Issue 2, pp. 1540024(1-7) (2015).
- 14. Jac Fredo A.R, Kavitha. G and Ramakrishnan. S, "Automated segmentation and analysis of corpus callosum in autistic MR images using fuzzy c-means based level set", Journal of Medical and Biological Engineering, published by Springer. (2015).
- 15.M. Kayalvizhi, G.Kavitha, C.M.Sujatha and S.Ramakrishnan, "Minkowski functionals based brain to ventricle index for analysis of AD progression in MR images", Measurement, published by Elsevier. pp. 103-112 (2015).
- 16. Latha G, Manamalli D and Kavitha G, "Analysis of acoustic back scattered signals of two different under water materials using Empirical mode decomposition and support vector machine", Indian Journal of Geo marine sciences, published by NISCAIR-CSIR, India. Vol. 44, Issue 5, pp. 656-664 (2015).
- 17. Kayalvizhi, M, Kavitha, G, Sujatha, CM & Ramakrishnan, "Formulation of Minkowski based ratio metric index in Alzheimer's MR brain images using localized region based Level set", Neurodegenerative Diseases, published by Karger medical and scientific publishers. Vol. 15, Issue 1, pp. 861 (2015).
- 18. N. SriMadhava Raja, G.Kavitha and S.Ramakrishnan, "Analysis of Vasculature detection in human retinal images using Bacterial Foraging optimization based multi-Thresholding", International Journal of Swarm Intelligence and Evolutionary computation, (2014).
- 19. A. R. Jac Fredo, G. Kavitha and S. Ramakrishnan, "Segmentation and morphometric analysis of subcortical regions in autistic MR brain images using fuzzy Gaussian distribution model based distance regularized multi pahe level set", International Journal of Biomedical Engineering and Technology, published by Inderscience. Vol. 15, Issue 3, pp. 211-223 (2014).
- 20. A. R. Jac Fredo, G. Kavitha and S. Ramakrishnan, "Segmentation and analysis of brain subcortical regions using regularized multiphase level set in autistic MR images", International Journal of Imaging Systems and Technology, published by Wiley Periodicals. Vol. 24, Issue 3, pp. 256-262 (2014).

- 21. A. R. Jac Fredo, G. Kavitha and S. Ramakrishnan, "Analysis of cortical and sub-cortical regions in autistic MR images using level set method and structure tensors", Biomedical Sciences Instrumentation, Vol. 50, pp. 140-9 (2014).
- 22. Asaithambi, Mythili, Subramanian, Srinivasan, Manoharan, Sujatha C., Ganesan Kavitha and Swaminathan, Ramakrishnan, "Analysis of restrictive pulmonary function abnormality using spirometric investigations and QPSO feature selection", Int. J. Biomedical Engineering and Technology, published by Inderscience. Vol. 16, Issue 3, pp. 195-208 (2014).
- 23. T.Akila and G.Kavitha, "Detection and classification of hard exudates in human retinal fundus images using clustering and random forest methods", International Journal of Emerging technology and advanced engineering, Vol. 4, Issue 2, pp. 24-29 (2014).
- 24. G.Kavitha, C.M.Sujatha and S.Ramakrishnan, "FPGA based hardware synthesis of thresholding algorithms for detection of glaucoma in retinal fundus images", Journal of Instrument society of India, Vol. 43, Issue 4, pp. 270-273 (2013).
- 25. G.Kavitha and C.M. Sujatha, "Analysis of ventricle regions in Alzheimer's brain MR images using level set based methods", International Journal of Biomedical Engineering and Technology, published by Inderscience. Vol. 12, Issue 3, pp. 300-309 (2013).