PUBLICATIONS – Dr. JUDE HEMANTH

- 1. D. Jude Hemanth, J. Anitha, Antoanela Naaji, Oana Geman, Daniela Elena Popescu and Le Hoang Son, "A Modified Deep Convolutional Neural Network for abnormal brain image classification", IEEE Access, vol. 7, pp: 4275-4283, 2018. (Impact Factor = 3.745).
- 2. Octavian Postolache, Ricardo Alexandre, Oana Geman, D Jude Hemanth, Deepak Gupta and Ashish Khanna, "Remote Monitoring of Physical Rehabilitation of Stroke Patients using IoT and Virtual Reality", IEEE Journal on Selected Areas in Communications, (Accepted), 2020. (Impact Factor = 11.420).
- 3. Douglas de A. Rodrigues, Roberto F. Ivo, Suresh Chandra Satapathy, Shuihua Wang, Jude Hemanth and Pedro P. Rebouças Filhoa, "A new approach for classification skin lesion based on transfer learning, deep learning and IoT system", Pattern Recognition Letters, (Accepted), 2020. (Impact Factor = 3.255).
- 4. Anju Asokan , J. Anitha , Monica Ciobanu , Andrei Gabor , Antoanela Naaji and D. Jude Hemanth, "Image Processing Techniques for Analysis of Satellite Images for Historical Maps Classification—An Overview", Applied Sciences, Vol. 10, No. 12, 4207, 2020. (Impact Factor = 2.474).
- 5. Rachna Jain, Preeti Nagrath, Gaurav Kataria, V. Sirish Kaushik and D. Jude Hemanth, "Pneumonia detection in chest x-ray images using convolutional neural networks and transfer learning", Measurement, (Accepted), 2020. (Impact Factor = 3.364).
- 6. Mamta Mittal, Lalit Mohan Goyal, Amit Verma, Iqbaldeep Kaur, Sumit Kaur and D. Jude Hemanth, "Deep learning based enhanced tumor segmentation approach for MR brain images", Applied Soft Computing, vol. 78, pp: 346-354, 2019. (Impact Factor = 5.472).
- 7. Maria Flynn, Dimitris Effraimidis, Anastassia Angelopoulou, Epaminondas Kapetanios, David Williams, D Jude Hemanth and Tony Towell, "Assessing the effectiveness of automated emotion recognition in adults and children for clinical investigation", Frontiers in Human Neuroscience, DOI: 10.3389/fnhum.2020.00070, 2020. (Impact Factor = 2.673).
- 8. Jose A Marmolejo Saucedo, D. Jude Hemanth and Utku Kose, "Prediction of Electroencephalogram time series with electro-search optimization algorithm trained adaptive neuro-fuzzy inference system", IEEE Access, vol. 7, pp: 15832 -15844, 2019. (Impact Factor = 3.745).
- 9. Mehshan Ahmed Khan, Muhamed Attique, Fawad Ahmed, Mamta Mittal, Lalit Mohan Goyal, D. Jude Hemanth and Suresh Chandra Satapathy, "Gastrointestinal diseases segmentation and classification based on duo-deep architectures", Pattern Recognition Letters, Vol. 131, pp. 193-204, 2020. (Impact Factor = 3.255).
- Debabrata Dansana, Raghvendra Kumar, Aishik Bhattacharjee, D. Jude Hemanth, Deepak Gupta, Ashish Khanna, Oscar Castillo, "Early diagnosis of COVID-19-affected patients based on X-ray and computed tomography images using deep learning algorithm", Soft Computing, DOI: 10.1007/s00500-020-05275-y, 2020.
- 11. S Jemimah Priyadharshini and D Jude Hemanth, "Investigation of Nanomaterial Dipoles for SAR reduction in Human Head", Frequenz, (Accepted), 2019. (Impact Factor = 0.543).

- 12. Oana Geman, Octavian Postolache, Luliana Chiuchisan, Marius Prelipceanu, Ritambhara and D Jude Hemanth, "An Intelligent Assistive Tool using Exergaming and Response Surface Methodology for patients with brain disorders", IEEE Access, vol.7, pp. 21502-21513, 2019. (Impact Factor = 3.745).
- 13. D. Jude Hemanth and J. Anitha, "Modified Genetic Algorithm approaches for classification of abnormal Magnetic Resonance brain tumor images", Applied Soft Computing, vol. 75, pp. 21-28, 2019. (Impact Factor = 5.472).
- 14. D.Jude Hemanth, Omer Deperlioglu and Utku Kose, "An enhanced diabetic retinopathy detection and classification approach using deep convolutional neural network", Neural Computing and Applications, (Accepted), 2018. (Impact Factor = 4.774).
- 15. Deepika Kumar, Nikita Jain, Aayush Khurrana, Sweta Mittal, Suresh Chandra Satapathy, Roman Senkerik and D. Jude Hemanth, "Automatic Detection of White Blood Cancer From Bone Marrow Microscopic Images Using Convolutional Neural Networks", IEEE Access, vol.8, pp. 142521 142531, 2020.
- 16. Mamta Mittal, Lait Mohan Goyal, D Jude Hemanth and Jasleen Kaur Sethi, "Clustering approaches for high dimensional databases: A review", WIREs Data Mining and Knowledge Discovery, vol. 9, no.3, 2019. (Impact Factor = 4.476).
- 17. Rachna Jain, Nikita Jain, Akshay Agarwal and D. Jude Hemanth, "Convolutional neural network-based Alzheimer's disease classification from magnetic resonance brain images", Cognitive Systems Research, vol. 57, pp. 147-159, 2019. (Impact Factor = 1.902).
- 18. Hongwei Chen, Luying Cao, D. Jude Hemanth, Zairan Li, Lijun Wu, Victor Hugo and Fuqian Shi, "Evaluation on diabetic plantar pressure data-set employing auto-segmentation technologies", Neural Computing and Applications, https://doi.org/10.1007/s00521-018-3838-x, 2018. (Impact Factor = 4.774).
- 19. D. Jude Hemanth, J. Anitha, Le Hoang Son and Mamta Mittal, "Diabetic Retinopathy diagnosis from retinal images using modified Hopfield neural network", Journal of Medical Systems, https://doi.org/10.1007/s10916-018-1111-6, 2018. (Impact Factor = 3.058).
- 20. D. Jude Hemanth, J. Anitha and Le Hoang Son, "Brain signal based human emotion analysis by Circular back propagation and deep kohonen neural networks", Computers & Electrical Engineering, vol. 68, pp: 170-180, 2018. (Impact Factor = 2.663).
- 21. D. Jude Hemanth, Utku Kose, Omer Deperlioglu and Victor Hugo Albuquerque, "An augmented reality supported mobile application for diagnosis of heart diseases", Journal of Supercomputing, https://doi.org/10.1007/s11227-018-2483-6, 2018, (Impact Factor = 2.469).
- 22. Pedro Pedrosa Filho, Suane Silva, Victor Praxedes, D. Jude Hemanth and Victor Albuquerque, "Control of singularity trajectory tracking for robotic manipulator by genetic algorithms", Journal of Computational Science, vol. 30, pp: 55-64, 2019, (Impact Factor = 2.644).
- 23. Beejesh A, Varun Gopi and D. Jude Hemanth, "Brain MR kurtosis imaging study: Contrasting gray and white matter", Cognitive Systems Research, vol. 55, pp. 135-145, 2019, (Impact Factor = 1.902).
- 24. K. Martin Sagayam and D. Jude Hemanth, "ABC algorithm-based optimization of 1-D Hidden Markov Model for hand gesture recognition applications", Computers in Industry (Elsevier), vol. 99, pp:313-323, 2018 (Impact Factor = 3.954).

- 25. D. Jude Hemanth, J. Anitha, Daniela Elena Popescu and Le Hoang Son, "A Modified Genetic Algorithm for Performance Improvement of Transform based Image Steganography Systems". International Journal of Intelligent and Fuzzy Systems, DOI: 10.3233/JIFS-169580, 2018, (Impact Factor = 1.851)
- 26. J Revathi, Anitha J, Rizwan P, R Manikandan, D Jude Hemanth and Amir H Gandomi, "Machine learning based left ventricular hypertrophy detection using multi-lead ECG signal", Neural Computing and Applications, DOI: https://doi.org/10.1007/s00521-020-05238-2, 2020. (Impact Factor = 4.774).
- 27. J.Jenkin Winston, Gul Fatma Turker, Utku Kose and D. Jude Hemanth, "Novel Optimization based hybrid self-organising map classifiers for iris image recognition", International Journal of Computational Intelligence Systems, vol.13, no.1, pp: 1048-1058, 2020. (Impact Factor = 1.838).
- 28. J. Jenkin Winston and D. Jude Hemanth, "A comprehensive review on iris image based biometric systems", Soft Computing, DOI: 10.1007/s00500-018-3497-y, 2018. (Impact Factor = 3.050).
- 29. K. Martin Sagayam and D. Jude Hemanth, "A probabilistic model for state sequence analysis in hidden markov model for hand gesture recognition", Computational Intelligence, vol. 35, no.1, pp: 59-81, 2019 (Impact Factor = 1.196).
- 30. D. Jude Hemanth and Jemima Priyadharshini, "Investigation and Reduction Methods of Specific Absorption Rate (SAR) for Biomedical Applications: a survey", International Journal of RF and Microwave Computer-aided Engineering, vol. 28, no. 3, pp: 1-15, 2018, (Impact Factor = 1.528)
- 31. Mamta Mittal, Lalit Mohan Goyal, Jasleen Kaur Sethi and D. Jude Hemanth, "Monitoring the impact of economic crisis on crimes using machine learning techniques", Computational Economics, vol. 53, no. 4, pp: 1467-1485, 2019. (Impact Factor = 1.317)
- 32. Pedro Filho, Solon Peixoto, Raul Nobrega, D Jude Hemanth, Aldisio Medeiros, Arun Kumar S and Victor Hugo Albuquerque, "Automatic histologically-closer classification of skin lesions", Computerized Medical Imaging and Graphics, (Accepted), 2018, (Impact Factor =3.750)
- 33. Longfei Zheng, Yu Wang, D. Jude Hemanth, Arun Kumar Sangiah, Lijun Wu and Fuqian Shi, "Data augmentation on mice liver cirrhosis microscopic images employing convolutional neural networks and support vector machine", Journal of Ambient Intelligence and Humanized Computing, (Accepted), 2018, (Impact Factor =4.594)
- 34. Bhavneet Kaur, Meenakshi, Mamta Mittal, Amit Varma, Lalit Mohan Goyal and D. Jude Hemanth, "An improved salient object detection algorithm combining background and foreground connectivity for brain image analysis", Computers and Electrical Engineering, (Accepted), 2018, (Impact Factor = 2.663)
- 35. D.Jude Hemanth, J. Anitha and Bernadetta Kwintiana Ane, "Fusion of Artificial Neural Networks for Learning Capability Enhancement: Application to Medical Image Classification", Expert Systems, https://doi.org/10.1111/exsy.1225, 2017, (Impact Factor = 1.546)
- 36. D.Jude Hemanth and J. Anitha, "A pattern based Artificial Bee Colony Algorithm for motion estimation in video compression techniques", Circuits, Systems and Signal Processing, DOI: 10.1007/s00034-017-0613-7, 2017, (Impact Factor = 1.681)
- 37. D.Jude Hemanth, J. Anitha & Valentina Emilia Balas, "Fast and Accurate Fuzzy C-Means algorithm for MR brain image segmentation" International journal of imaging systems and technology, vol.26, no.3, pp: 188-195, 2016. (Impact Factor = 1.925).

- 38. D.Jude Hemanth, J. Anitha & A. Indumathy, "Diabetic Retinopathy diagnosis in retinal images using Hopfield neural network" IETE Journal of Research, DOI:10.1080/03772063.2016.1221745, 2016. (Impact Factor = 1.125).
- 39. D.Jude Hemanth, S. Uma Maheswari, Daniela Elena Popescu and Antonalla Naaji, "Application of Genetic Algorithm and Particle Swarm Optimization techniques for improved image steganography systems", Open Physics, DOI: 10.1515/phys-2016-0052, 2016. (Impact Factor = 0.963).
- 40. K. Martin Sagayam and D. Jude Hemanth, "Hand posture and gesture recognition techniques for virtual reality applications: A survey", Virtual Reality, DOI: 10.1007/s10055-016-0301-0, 2016. (Impact Factor = 3.634).
- 41. S. Uma Maheswari & D. Jude Hemanth "Frequency domain QR code based image steganography using Fresnelet transform", International Journal of Electronics and Communications (Elsevier), vol.69, no.2, pp. 539-544, 2015. (Impact Factor 2.924).
- 42. S. Uma Maheswari & D. Jude Hemanth "A Hybrid Edge Detector and Ridgelet Transform based steganography technique for imaging applications", Defense Science Journal, vol.65, no.3, pp: 214-219, 2015. (Impact Factor = 0.730).
- 43. S. Uma Maheswari & D. Jude Hemanth "Performance Improved Transform based Image Steganography Systems using Optimization Techniques", Multimedia Tools and Applications (Springer), DOI: 10.1007/s11042-015-3035-1, 2015. (Impact Factor = 2.313).
- 44. D.Jude Hemanth, J. Anitha & Valentina Emilia Balas, "Performance Improved Modified Fuzzy C-Means Algorithm for Image Segmentation Applications" Informatica, Vol.26, No.4, pp:1-14, 2015. (Impact Factor = 3.312).
- 45. Mohammed Majid Al-Rifaie, Ahmed Aber & D. Jude Hemanth, "Deploying swarm intelligence for medical imaging: Identifying metastasis, microcalcification and brain image segmentation", IET systems biology, doi: 10.1049/iet-syb.2015.0036, 2015. (Impact Factor = 1.000).
- 46. D.Jude Hemanth, C.Kezi Selva Vijila, A.Immanuel Selvakumar & J.Anitha, "Performance Improved Iteration-Free Artificial Neural Networks for Abnormal Magnetic Resonance Brain Image Classification", Neurocomputing (Elsevier), vol.130, pp.98-107, 2014 (Impact Factor = 4.438).
- 47. D.Jude Hemanth, C.Kezi Selva Vijila, A.Immanuel Selvakumar & J.Anitha "Distance Metrics based Time Efficient Fuzzy Algorithm for Abnormal MR Brain Image Segmentation", Neural Computing & Applications (Springer), Vol.22, No.5, pp. 1013-1022, 2013. (Impact Factor = 4.774).
- 48. J. Anitha & D.Jude Hemanth, "An Efficient Kohonen-Fuzzy Neural Network Based Abnormal Retinal Image Classification System", Neural Network World, Vol.23, no.6, pp. 149-167, 2013. (Impact Factor = 0.635).
- 49. J.Anitha, C.K.S.Vijila, A.I.Selvakumar, A.Indumathy & D.Jude Hemanth, "Automated multi-level pathology identification techniques for abnormal retinal images using Artificial Neural Networks", British Journal of Ophthalmology, Vol.96, no.2, pp: 220-223, 2012. (Impact Factor = 3.611).
- 50. J.Anitha, C.K.S.Vijila, A.I.Selvakumar & D.Jude Hemanth, "Performance improved PSO based modified Kohonen neural network for retinal image classification", Journal of Chinese Institute of Engineers, Vol.35, no.8, pp: 979-991, 2012. (Impact Factor = 0.667).

- 51. D.Jude Hemanth, C.Kezi Selva Vijila & J.Anitha "A High Speed Back Propagation Neural Network for Multistage MR Brain Tumor Image Segmentation", Neural Network World, Vol.21, no.1, 2011. (Impact Factor = 0.635).
- 52. Alexandru Popa, Mihaela Hnatiuc, Mirel Paun, Oana Geman and Jude Hemanth, Daniel Dorcia, Simona Ghita and Le Hoang Son, "An Intelligent IoT Based Food Quality Monitoring Approach Using Low Cost Sensors", Symmetry, (Accepted), 2019. (Impact Factor = 2.645).
- 53. Rachna Jain, Nikita Jain, Yash Gupta, Tarun Chugh, Tushar Chugh and D. Jude Hemanth, "A Modified Fuzzy Logic Relation Based Approach for Electricity consumption forecasting in India", International Journal of Fuzzy Systems, (Accepted), 2019. (Impact Factor = 4.406).
- 54. J Jenkin Winston and D Jude Hemanth, "Performance enhanced modified self-organising map for iris data classification", Expert Systems, (Accepted), 2019. (Impact Factor = 1.546).
- 55. Adrian Brezulianu, Oana Geman, Marius Dan Zbancioc, Marius Hagan, Cristian Aghion, D Jude Hemanth and Le Hoang Son, "IoT Based Heart Activity Monitoring Using Inductive Sensors", Sensors, (Accepted), 2019. (Impact Factor = 3.240).
- 56. Ansh Mittal, Anu Soorya, Preeti Nagrath and D Jude Hemanth, "Data Augmentation based morphological classification of galaxies using deep convolutional neural network', Earth Science Informatics, DOI: 10.1007/s12145-019-00434-8, 2019. (Impact Factor = 1.450).
- 57. Sujatha R, Aarthy S L, Jyotir Moy Chatterjee and D. Jude Hemanth, "Forest data visualization and land mapping using support vector machines and decision trees", Earth Science Informatics, DOI: https://doi.org/10.1007/s12145-020-00492-3, 2020. (Impact Factor = 1.450).
- 58. A Anju Asokan, Daniela Elena Popescu, J Anitha and D Jude Hemanth, "Bat algorithm based non-linear contrast stretching for satellite image enhancement", Geosciences, (Accepted), 2020. (Scopus)
- 59. J Revathi, J. Anitha and D Jude Hemanth, "Training Feedforward Neural Network using Genetic Algorithm to Diagnose Left Ventricular Hypertrophy", Telkomnika, (Accepted), 2020. (Scopus)
- 60. B. Ben Sujin, C. Kezi Selva Vijila, Jude Hemanth and Cynthia Hubert, "Frequency Dependent Adaptive Chemotaxis in Bacterial Foraging Optimization for ST Segment Elevation Myocardial Infarction Prediction", Indian Journal of Science and Technology, Vol. 9, No.1, pp.1-9, 2016 (Scopus)
- 61. Abder-Rehman Ali, Couceiro Micael, Aboul Ella Hassanien and Jude Hemanth D, "Fuzzy C-means based on Minkowski distance for liver CT image segmentation", Intelligent Decision Technologies-An International Journal", vol.10, pp: 393-407, 2016, (Scopus)
- 62. M Kalpana Chowdhry and D Jude Hemanth, "Human emotion recognition using intelligence approaches: A review", Intelligent Decision Technologies An International Journal, vol.13, no.4, pp: 417-433, 2019.
- 63. K T Dilna and D. Jude Hemanth, "Detection of uterus fibroids in ultrasound images: a survey", International Journal of Pure and Applied Mathematics, vol. 18, no.6, 2018, (Scopus)
- 64. Revathi J, Anitha J and D Jude Hemanth, "An Intelligent Medical Decision Support System for Diagnosis of Heart Abnormalities in ECG Signals", Intelligent Decision Technologies An International Journal, (Accepted), 2020.

- 65. S. Uma Maheswari & D.Jude Hemanth, "A survey on different methodologies for image steganography based data hiding applications", International Journal of Information and Communication Technology, Vol. 7, No. 4/5, pp. 521-536, 2015. (Scopus)
- 66. S. Uma Maheswari & D. Jude Hemanth "Discrete Ripplet transform based steganography system for imaging applications", International Journal of Reasoning based intelligent systems, vol.7, no.1/2, pp:130-135, 2015. (Scopus).
- 67. D.Jude Hemanth, C.Kezi Selva Vijila, A.Immanuel Selvakumar & J.Anitha "Hybrid Artificial Neural Network for MR Brain Image Segmentation", Information Journal, Vol. 16, No. 1(B), pp. 669-674, 2013. (Scopus).
- 68. Abdalla Zidan, Aboul Ella Hassanien & D.Jude Hemanth, "Level Set-based CAD System for Liver Image Segmentation", International Journal of Imaging & Robotics, Vol. 9, no.1, pp: 26-36, 2013. (Scopus).
- 69. J.Anitha, C.Kezi Selva Vijila & D.Jude Hemanth, "An Overview of Computational Intelligence Techniques for Retinal Disease Identification Applications", International Journal of Reviews in computing, Vol. 5, no.1, pp: 29-46, 2011.
- 70. Jestin V.K., J.Anitha and D.Jude Hemanth, "Genetic Algorithm for Retinal Image Analysis", International Journal of Computer Applications, Vol. 1, pp: 48–52, 2011.
- 71. Babilu Daniel and Jude D Hemanth, "Acoustic Echo Cancellation for Noisy Signals", International Journal of Computer Applications, Vol. 1, pp. 1–7, 2011.
- 72. J.Anitha, C.Kezi Selva Vijila & D.Jude Hemanth, "A Hybrid GA based fuzzy approach for abnormal retinal image classification", International Journal of Cognitive Informatics and Natural Intelligence, Vol.4, No.3, pp. 29-43, 2010. (Scopus)
- 73. D.Jude Hemanth, C.Kezi Selva Vijila & J.Anitha "Performance improved PSO based modified Counter Propagation Neural Network for abnormal MR brain image classification" International Journal of Advances in Soft Computing and Its Applications, vol.2, no.1, pp: 65-84, 2010. (Scopus)
- 74. A Anitha Angeline, L Godson Asirvatham, D Jude Hemanth, J Jayakumar and Somchai Wongwises, "Performance prediction of hybrid thermoelectric generator with high accuracy using artificial neural networks", Sustainable energy technologies and assessments, vol. 33, pp: 53-60, 2019. (Scopus)
- 75. D.Jude Hemanth, D.Selvathi & J.Anitha "Application of ART neural network for abnormal MR brain image classification", International Journal of Health Information Sciences and Informatics, vol.5, no.1, pp: 61-75, 2010.
- 76. D.Jude Hemanth, C.Kezi Selva Vijila & J.Anitha "Application of Neuro fuzzy model for abnormal MR brain image classification", International Journal of Biomedical Soft Computing and Human Sciences, vol.16, no.1, pp: 95-102, 2010.
- 77. D.Jude Hemanth, C.Kezi Selva Vijila & J.Anitha "Experimental verification of the significance of skull tissue removal in MR brain tumor images", International Journal of Computer Applications, vol.1, no.29,pp: 56-61, 2010.

- 78. D.Jude Hemanth, C.Kezi Selva Vijila & J.Anitha "A Survey on Artificial Intelligence based Brain Pathology Identification Techniques in Magnetic Resonance Images", International Journal of Reviews in Computing, vol.4, no.1, pp: 30-45, 2010.
- 79. J.Anitha, C.Kezi Selva Vijila & D.Jude Hemanth, "An enhanced GA based neural network for abnormal retinal image classification", International Journal for Computational Vision and Biomechanics, vol.3, no.2, pp: 125-134, 2010.
- 80. D.Jude Hemanth, D.Selvathi & S. Thamarai Selvi, "Performance Evaluation of Hybrid Supervised and Unsupervised Neural Model for Abnormal Tumor Classification in Brain MR Images", International Journal for Computational Vision and Biomechanics, vol.2, No.1, pp: 31-39, 2009.
- 81. J.Anitha, C.Kezi Selva Vijila & D.Jude Hemanth, "Comparative analysis of GA and PSO algorithms for abnormal retinal image classification", International Journal of Recent Trends in Engineering, vol.2, No.3, pp: 143