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## **RESEARCH ACTIVITIES**

### **A. PAPER PUBLICATIONS**

#### **TOTAL PAPERS: 131**

**International Journals 80**  
**International Conferences 48**  
**National Conferences : 3**

#### **INTERNATIONAL JOURNALS**

- 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).**
- 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).**
- Douglas de A. Rodrigues, Roberto F. Ivo, Suresh Chandra Satapathy, Shuihua Wang, Jude Hemanth and Pedro P. Rebouças Filho, “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).**
- 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).**
- 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).**
- Mamta Mittal, Lalit Mohan Goyal, Amit Verma, Iqbaldeep Kaur, Sumit Kaur and D. Jude

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- Maria Flynn, Dimitris Efthymidis, 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).**
- 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).**
- 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](https://doi.org/10.1007/s00500-020-05275-y), 2020.
- S Jemimah Priyadarshini and D Jude Hemanth, “Investigation of Nanomaterial Dipoles for SAR reduction in Human Head”, *Frequenz*, (**Accepted**), 2019. **(Impact Factor = 0.543).**
- 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).**
- 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).**
- 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).**
- Deepika Kumar, Nikita Jain, Aayush Khurana, 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.
- 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).**

- 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**).
- 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**).
- 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**).
- 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**).
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- 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**).
- 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**).
- 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**)
- 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**).

- 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).**
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- 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).**
- 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).**
- 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).**
- 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).**
- 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).**
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- 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).**

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- 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)**
- J Revathi, J. Anitha and D Jude Hemanth, “Training Feedforward Neural Network using Genetic Algorithm to Diagnose Left Ventricular Hypertrophy”, Telkomnika, (Accepted), 2020. **(Scopus)**
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**Total :34**

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<b>Edited Books</b>	<b>23</b>
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