# Dr. D. JUDE HEMANTH ASSOCIATE PROFESSOR

# KARUNYA UNIVERSITY, INDIA

http://cis.ieee.org/neural-networks tc.html

http://www.math.unipd.it/~lpasa/deep/people.html

https://www.bookdepository.com/author/Jude-Hemanth

http://www.mirlabs.net/network/Asia/India/catalogue/D.Jude Hemanth.php

http://lapisco.ifce.edu.br/?wpdmpro=jude-hemanth-cv

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Date of Birth :23.04.1981

# **Academic Background**:

Degree	Institution	University	Period	Percentage of Marks	Achievements
Ph.D (Medical Image Analysis using soft computing techniques)	Karunya University, Coimbatore	Karunya University	2009-2013	9 CGPA	
M.E (Communication Systems)	Mepco Schlenk Engineering College, Sivakasi	Anna University	2004-2006	89.12	University 1st rank
B.E (Electronics and Communication Engineering)	Karunya Institute of Technology and Sciences	Bharathiar university	1998-2002	85.9	1st class with distinction

# **Professional Experience:**

Teaching experience = 15 years

Institution/Place	University	Designation	Period
Karunya University	Karunya University	Associate Professor	July 2013-Till date
Karunya University,	Karunya University	Assistant professor (SG)	August 2010- July 2013
Coimbatore			
Karunya University,	Karunya University	Assistant Professor	January 2008- August 2010
Coimbatore			
Karunya University,	Karunya University	Lecturer	May 2006-January 2008
Coimbatore			
Regency Institute of	Pondicherry University	Lecturer	November 2002 to May
Technology, Yanam			2004



# **Areas of interest**

- > Computational Intelligence
- ➤ Biomedical image processing
- > Optimization techniques

# Courses offered/taught in UG

- ➤ Biomedical instrumentation
- ➤ Neural networks and fuzzy systems

# Courses offered/taught in PG

- Soft computing
- Digital image processing
- Multimedia compression techniques

# **Research Guidance**

• Ph.D: 10 (5-Completed, 5-Ongoing)

• Internships (Outside India): 2

• M.Tech projects: 23

Category	Name of the candidate	Research Topic	Status
	S. Uma Maheswari	Image steganography using	Completed (Highly
		modified Genetic Algorithm	Commended)
	Ben Sujin	Noise cancellation in ECG signals	Completed (Highly
		using optimization algorithms	Commended)
Ph.D	K. Martin Sagayam	Hand gesture recognition system	Completed (Highly
		for virtual reality applications	Commended)
	S. Jemimah Priyadharshini	SAR estimation and reduction	Completed (Highly
		using soft computing techniques	Commended)
	K T Dilna	Abnormality (fibroids) detection	Ongoing
		in ultrasound images using deep	
		learning techniques	
	Renjini Surendran	Scene Understanding using	Ongoing
		artificial intelligence techniques	
	J Jenkin Winston	Development of novel biometric	Completed (Highly
		algorithms for security	Commended)
		applications	
	M Kalpana Chowdhary	Human Emotion Analysis using	Ongoing
		Intelligence Techniques	
	K. Ganesh	Multimodal Sentimental Analysis	Ongoing
		using Machine Learning	
		Techniques	
	Jennifer Eunice	Sign language detection using	Ongoing
		deep learning techniques	

	Tobias Fredriech Klepch	Medical Image Segmentation	Completed
	(Lubeck University,		
Internship	Germany)		
	Steven Vande Ryse,	Neural networks for image	Completed
	(University of Ghent,	analysis	
	Belgium)		

# **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 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).
- 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 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).

- 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).
- 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, 2020.
- S Jemimah Priyadharshini 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 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.
- 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, <a href="https://doi.org/10.1007/s00521-018-3838-x">https://doi.org/10.1007/s00521-018-3838-x</a>, 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, <a href="https://doi.org/10.1007/s10916-018-1111-6">https://doi.org/10.1007/s10916-018-1111-6</a>, 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).
- 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, <a href="https://doi.org/10.1007/s11227-018-2483-6">https://doi.org/10.1007/s11227-018-2483-6</a>, 2018, (Impact Factor = 2.469).
- 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).
- 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).
- 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).
- 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).
- 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)
- 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)
- 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)
- 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)
- 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)
- 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, <a href="https://doi.org/10.1111/exsy.12225">https://doi.org/10.1111/exsy.12225</a>, 2017, (Impact Factor = 1.546)
- 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)
- 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).

- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).

- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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)
- 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)

- 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)
- 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.
- 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)
- 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.
- 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)
- 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).
- 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).
- 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).
- 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.
- 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.
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- 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)
- 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)

- 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)
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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. 143-145, 2009.

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- D.Jude Hemanth, C.Kezi Selva Vijila & J.Anitha, "Comparative analysis of neural model and fuzzy model for MR brain image segmentation", IEEE World Congress on Nature and Biologically Inspired Computing, pp: 1616-1671, 2009. Publisher: IEEE, Place: Coimbatore, Tamilnadu. (scopus)

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- D.Jude Hemanth & J.Anitha, "Comparative Analysis of Neural Model and Statistical Model for Retinal Image Segmentation", 2<sup>nd</sup> International Conference on Soft Computing for Problem Solving. Publisher: Springer, Place: Jaipur, Rajasthan. (scopus)
- D.Jude Hemanth & J.Anitha, "Image pre-processing and feature extraction techniques for magnetic resonance brain image analysis", Digital Contents and Applications, CCIS 350, pp. 349-356, 2012. Publisher: Springer, Place: South Korea. (scopus)
- D.Jude Hemanth, D.Selvathi & Thamarai Selvi, "Comparative evaluation of fuzzy logic techniques and histogram based method for abnormal tumor segmentation in brain MR images", IEEE International Conference on Signal & Image Processing, vol.1, pp. 369-373, 2006. Publisher: McMillan Series, Place: Hubli, Karnataka.
- D.Jude Hemanth, D.Selvathi, S.Thamarai Selvi & J.Anitha, "Automated morphology based extra cranial tissue removal in MR brain tumor images", International Conference on Cognition and Recognition, pp: 547-553, 2008. Place: Mysore, Karnataka.
- D.Jude Hemanth & J.Anitha, "Single layer Perceptron based retinal image classification", International Conference on Software technology and Computer engineering, pp. 43-46, 2013. Publisher: IPM, ISBN: 978-93-82208-53-2. Place: Cochin, India.
- Dada Emmanuel Gbenga, D. Jude Hemanth, Haruna Chiroma, Shafi'i Muhammad Abdulhamid and Adewale Johnson Taiwo, "Non-nested Generalization (NNGE) algorithm for efficient and early detection of diabetes", 3<sup>rd</sup> International Conference on Information Technology and Intelligent Transportation Systems, (Accepted), 2018. Place: China (scopus)
- Jemimah Priyadharshini and D Jude Hemanth, "Investigation of SAR exposure assessment in vital human tissues at GSM frequency", Proceedings of 4<sup>th</sup> International Conference on signal

- processing and intelligent recognition systems, pp: 366-372, 2019. Publisher: Springer, Place: Bangalore. (scopus)
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- K T Dilna and D. Jude Hemanth, "Fibroid detection in ultrasound uterus images using image processing techniques", International Conference on Innovative Computing and Communications, pp: 173-179, Publisher: Springer, Place: New Delhi, 2020 (Scopus).
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- J S Park, D Lopez De Luise, D J Hemanth and J Perez, "Environment Description for Blind People", Proceedings of 7<sup>th</sup> International Workshop on Soft Computing Applications, Romania (Accepted), 2016. (Springer) (scopus)
- Vania Estrela, Osamu Saotome, Jude Hemanth and Rui Cabral, "Emergency Response Cyber-Physical System for Disaster Prevention with Sustainable Electronics", Proceedings of 10<sup>th</sup> International Conference on Pervasive Technologies related to Assistive Environments, DOI: http://dx.doi.org/10.1145/3056540.3064966, Publisher: ACM, Place: Greece, 2017. (scopus)
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- Daniela Elena Popescu, Marcela Florina Prada, Anca Dodescu, D. Jude Hemanth and Constantin Bungau, "A secure confident cloud computing architecture solution for a smart campus", Proceedings of 7<sup>th</sup> International Conference on Computers, Communications and Control, pp: 240-245, Publisher: IEEE, Place: Romania, 2018 (Scopus)
- Jemimah Priyadharshini S and D Jude Hemanth, "Effect of SAR impact on a tissue cube with Graphene-dipole for 900 MHz", Proceedings of 4<sup>th</sup> IEEE International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-informatics, pp. 350-353, Publisher: IEEE, Place: Chennai, India, 2018 (Scopus)
- D. Jude Hemanth, Daniela Elena Popescu and J.Anitha, "Analysis of Daubechies wavelet transform based human detection approaches in digital videos", Proceedings of 22<sup>nd</sup> IEEE

International Conference on Intelligent Engineering Systems, pp. 383-388, Publisher: IEEE, Place: Spain, 2018 (Scopus)

- Vania Viera Estrela, D. Jude Hemanth, Osamu Saotome, Edwiges G H Grata and Daniel R F Izario, "Emergency response cyber-physical system for flood prevention with sustainable electronics", Proceedings of the 3<sup>rd</sup> Brazilian Technology Symposium, pp: 319-328, Publisher: Springer, Place: Brazil, 2018 (Scopus)
- J. J. Winston, D. J. Hemanth, A. Angelopoulou and E. Kapetanios, "Iris image recognition using optimized Kohonen self organizing neural network," *9th International Conference on Imaging for Crime Detection and Prevention (ICDP-2019)*, London, UK, 2019, pp. 74-79. (Scopus)
- M. K. Chowdary, D. J. Hemanth, A. Angelopoulou and E. Kapetanios, "Feature extraction techniques for human emotion identification from face images," *9th International Conference on Imaging for Crime Detection and Prevention (ICDP-2019)*, London, UK, 2019, pp. 86-92. (Scopus)

# **NATIONAL CONFERENCES**

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- D.Jude Hemanth, D.Selvathi & Thamarai Selvi, "Training-Free Counter Propagation Neural Network Based Classification of Brain Tumors in MR Images using Texture Features", National Conference on Advanced computing, pp. 180-186, 2006. Place: MIT, Anna University, Chennai.
- Lincy Annet & D.Jude Hemanth, "MR Brain Tumor Image Segmentation using Fuzzy Clustering Algorithm", National Research Conference on Challenges & Invocations in Information Technology, pp. 374-377, 2008. Place: Erode.

#### B. BOOKS/ EDITED BOOKS/ BOOK CHAPTERS/ EDITORIALS

#### **Total** :34

Books :1 Edited Books :23 Book chapters :5 Editorial :5

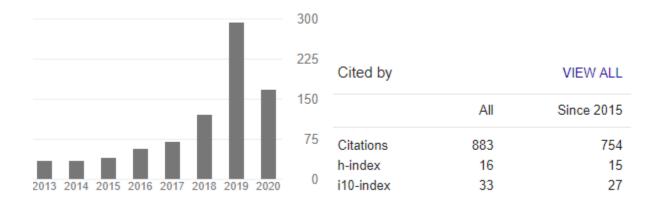
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- ➤ D.Jude Hemanth and Valentina Emilia Balas (eds), "Biologically Rationalized Computing Techniques for Image Processing Applications" in the Springer series Lecture Notes on Computational Vision and Biomechanics (Springer), 2017. (Scopus)
- ➤ D. Jude Hemanth and Vania Viera Estrela (eds), "Deep Learning for Image Processing Applications" in the Advances in Parallel Computing Series (IOS Press), 2018. (Scopus)

- ➤ Mamta Mittal, D. Jude Hemanth, Valentina Emilia Balas and Ragavendra Kumar (eds), "Big Data for Parallel Computing" in the Advances in Parallel Computing Series (IOS Press), 2018. (Scopus)
- ➤ D. Jude Hemanth (eds), "Artificial Intelligence Techniques for Satellite Image Analysis" in the Remote sensing and Digital Image Processing Series (Springer), 2019. (Scopus)
- ➤ D. Jude Hemanth and Valentina Emilia Balas (eds), "Nature Inspired Optimization techniques for image processing applications" in the Intelligent Systems Reference Library series (Springer), 2018. (Scopus)
- ➤ D.Jude Hemanth, Deepak Gupta and Valentina Emilia Balas (eds), "Intelligent Data Analysis for Biomedical Applications: Challenges and Solutions", in the Intelligent Data Centric Systems series (Elsevier), 2018. (Scopus)
- ➤ Vania Viera Estrela, D. Jude Hemanth and Osamu Saotome (eds), "Imaging and Sensing for unmanned aeriel vehicles-vol. I in the book series of IET, 2018. (Scopus).
- ➤ Vania Viera Estrela, D. Jude Hemanth and Osamu Saotome (eds), "Imaging and Sensing for unmanned aeriel vehicles-vol. II in the book series of IET, 2018. (Scopus).
- ➤ D. Jude Hemanth and S Smys (eds), "Proceedings of International Conference on Computational Vision and Bio Inspired Computing" in the Springer series Lecture Notes on Computational Vision and Biomechanics (Springer), 2017. (Scopus)
- D. Jude Hemanth and Valentina Emilia Balas (eds), "Telemedicine Technologies: Big data, Deep learning, Robotics and Mobile healthcare (Elsevier), 2018. (Scopus).
- ➤ D. Jude Hemanth et al. (eds), "Proceedings of International Conference on Intelligent Data Communication Technologies and Internet of Things", in the Lecture Notes on Data Engineering and Communications Technologies series (Springer), 2018.
- ➤ D.Jude Hemanth and Utku Kose (eds), "Artificial Intelligence and Applied Mathematics in Engineering Problems", in the Lecture Notes on Data Engineering and Communications Technologies series (Springer), 2018.
- ➤ D. Jude Hemanth, Oscar Castillo, Bogdan Patrut, et. al. (eds), "Emerging Trends in Computing and Expert Technology", in the Lecture Notes on Data Engineering and Communications Technologies series (Springer), 2018.
- ➤ D. Jude Hemanth and Thushari Silva (eds), "Proceedings of SLAAI- International Conference on Artificial Intelligence", in the CCIS series (Springer), 2018.
- ➤ D. Jude Hemanth, Madhulika Bhaduria and Oana Geman, "Data Visualization and Knowledge Engineering: *Spotting data points with artificial intelligence*", in the Lecture Notes on Data Engineering and Communications Technologies series (Springer), 2019.
- ➤ D. Jude Hemanth, B. Vinoth Kumar and G R Karpagam (eds), "Recent advances on memetic algorithms and its applications in image processing" in the Studies in Computational Intelligence (Springer), 2019.
- ➤ D.Jude Hemanth and J.Anitha, "Computational Intelligence Techniques for Pattern Recognition in Biomedical Image Processing Applications" in *Machine Learning Algorithms for Problem Solving in Computational Applications: Intelligent Techniques*, Sid Kulkarni, Editor, IGI Global (USA), 2012, pp. 195-209, Chapter 12. (Scopus)
- ➤ D.Jude Hemanth and J.Anitha, "Medical Image Analysis using soft computing techniques" in *Soft Computing techniques in Engineering Applications*, Springer (Studies in Computational

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- ➤ K. Martin Sagayam and D.Jude Hemanth, "Optimization of Compressive Sensing based 2-D HMM approach using ABC Algorithm for Hand Motion Recognition System" in *Hybrid Intelligent Techniques for Pattern Analysis and Understanding*, CRC Press, Siddharth Bhattacharya, Anirban Mukherjee and Indrajit Pan (eds), 2016. (Scopus)
- Sagayam K.M., Hemanth D.J., Vasanth X.A., Henesy L.E., Ho C.C., "Optimization of a HMM-Based Hand Gesture Recognition System Using a Hybrid Cuckoo Search Algorithm" in Hybrid Metaheuristics for Image Analysis. Springer, Bhattacharyya S. (eds)
- ➤ Jin Sung Park, Daniela López De Luise and D.Jude Hemanth, "Object trajectory prediction with scarce environment information" in *Biologically Rationalized Computing Techniques for Image Processing Applications*, Springer (Lecture Notes in Computational Vision and Biomechanics), pp: 43-55, 2017 (Scopus)
- ➤ D. Jude Hemanth and Ali Ismail Aawad, Guest Editorial, International Journal of Computational Vision and Robotics (Inderscience), Special issue on Advances in soft computing techniques for image processing, vol.3, no.4, pp:249-250, 2014. (Scopus)
- ➤ D. Jude Hemanth and Vania Viera Estrela, Guest Editorial, International Journal of Information and Communication Technology (Inderscience), Special issue on Medical Informatics A practical perspective, vol.7, no.4/5, pp:333-335, 2015. (Scopus)
- ➤ D. Jude Hemanth and Aboul Ella Hassanien, Guest Editorial, International Journal of Advanced Intelligence Paradigms, Special issue on Hybrid soft computing approaches for image processing: The 'X' dimension, vol.7, no.2, pp:109-110, 2015. (Scopus)
- ➤ D. Jude Hemanth and Valentina Emilia Balas, Guest Editorial, Intelligent Decision Technologies-An International Journal, Special issue on Decision support systems for medical imaging applications, vol.10, pp. 329-330, 2016. (Scopus)
- ▶ D. Jude Hemanth, Lipo Wang, Joao Manuel Tavares, Fuqian Shi and Vania Viera Estrela, Guest Editorial, IEEE Access, Special issue on Computational Intelligence Techniques for medical industry Special issue on Soft Computing Techniques for image analysis in the medical industry, (Accepted), 2018. (SCIE indexed, IF =3.24)

(FOR THE COMPLETE LIST, SEE: <a href="https://www.bookdepository.com/author/Jude-Hemanth">https://www.bookdepository.com/author/Jude-Hemanth</a>)

# **C. CITATIONS**



- <a href="https://www.scopus.com/authid/detail.uri?authorId=35100335700">https://www.scopus.com/authid/detail.uri?authorId=35100335700</a>
- http://scholar.google.co.in/citations?user=lwOyzREAAAAJ&hl=en

**Cumulative Impact Factor = 168.530** 

# **D. EDITORIAL POSITIONS & REVIEWER**

# • Editor-in-Chief of:

- ➤ International Journal of Image Processing and Vision Sciences
- ➤ Book Series Editor: Biomedical Engineering (Elsevier)
- ➤ Book Series Editor: Biomedical and Robotics Healthcare (Taylor & Francis)
- > Consulting editor: Elsevier

#### • **Associate Editor** of:

- ➤ IEEE Access (IF=4.098) (2017-2018)
- ➤ Journal of Intelligent and Fuzzy Systems (IF=1.637)
- ➤ Mathematical Problems in Engineering (IF= 1.179)
- Scientific Editor of Dyna (Spain) (IF=0.781)

# • Section Editor of:

- ➤ International Journal of Electronics and Telecommunications (SCOPUS)
- Scientific Journal of TELKOMNIKA (SCOPUS)
- ➤ IAES International Journal of Artificial Intelligence

# • Assistant Editor of:

Journal of Pattern Recognition Research, USA.

# • Editorial board member of:

- ➤ International Journal of Advanced Intelligent Paradigms (SCOPUS)
- ➤ International Journal of Tomography and Simulation (SCOPUS)
- ➤ International Journal of Imaging and Robotics (SCOPUS)
- ➤ Intelligent Decision Technologies-An International Journal (SCOPUS)
- > International Journal of Computer Applications.
- ➤ International Journal of Reviews in Computing.
- International Journal of Hybrid Information Technology.
- ➤ International Journal of Advanced Computer Research
- > International Journal of Advances in Science and Technology
- ➤ International Journal of Advances in Computer Science and Communication Engineering

# • Guest Editor of:

- > Special issue on "The boon and bane of medical image processing- An introspection" in Sensing and Imaging Journal (Springer)
- > Special issue on "Developments and issues in medical imaging" in International Journal of Biomedical Engineering and Technology (Inderscience)
- ➤ Special issue on "Issues and Challenges in Developing Biomedical and Image Processing Algorithms in the 21<sup>st</sup> Century" in International Journal of Telemedicine and Clinical practices (Inderscience)
- ➤ Special issue on "Computer aided Soft Computing Techniques for Biomedical Applications" in IJCA, USA.
- > Special issue on "Artificial Intelligence and its applications" in IJHIT, S.Korea
- Special issue on "Soft Computing for Engineering Applications" in TELKOMNIKA, Indonesia
- Special issue on "AI techniques-Novel approaches & Practical applications" in IJCA, USA.
- > Special issue on "Practical Perspective of Digital Imaging for Computational Applications" in International Journal of Imaging and Robotics, India
- > Special issue on "Effectiveness of image processing for real-time applications" in International Journal of Computational Vision and Robotics, (*Inderscience Publishers*)
- > Special issue on "Medical Informatics and Technology" in International Journal of Information and Communication Technology, (*Inderscience Publishers*)
- ➤ Special issue on "Decision support systems for medical imaging applications" in Intelligent Decision Technologies An International Journal (*IOS Press*)
- > Special session on "Image Processing & its Applications" in International Conference on Signal, Image processing & Pattern Recognition, South Korea.
- > Special session on "Artificial Intelligence Techniques for Imaging Applications" in Seventh IASTED International Conference on Advances in Computer Science and Engineering, Thailand.
- > Special session on "Soft computing techniques for multimedia applications" in International Conference on Advanced Machine Learning Techniques and its Applications, Egypt.
- ➤ Special issue on "Image processing techniques A practical perspective" in International Journal of Imaging and Robotics. (scopus indexed)
- > Special issue on "Recent trends in image processing" in International Journal of Tomography and Simulation. (scopus indexed)
- > Special issue on "Advances in Machine Learning and Intelligent Systems- Challenges and Solutions" in International Journal of Reasoning Based Intelligent Systems. (Scopus Indexed)

- > Special session on "Multiple Facets of Image Processing: The X dimension" in International Conference on Digital Content Applications, South Korea.
- > Special session on "Soft computing for problem solving in Imaging applications" in 2<sup>nd</sup> International conference on advances in computing, communications and informatics, Mysore, India.
- > Special session on "Hybrid Soft computing techniques for practical applications" in 5<sup>th</sup> International conference on Soft Computing for Problem Solving, IIT Roorkee, India.
- ➤ Special session on "Innovative Soft Computing Techniques for Pattern Recognition Applications" in 6<sup>th</sup> International conference on Advanced Computing, Networking and Informatics, NIT Silchar, Assam, 2018
- ➤ Special issue on "Hybrid soft computing approaches for image processing –The 'X' dimension" in International Journal of Advanced Intelligent Paradigms. (*Inderscience Publishers*)

#### • Reviewer of:

- > IEEE Transactions on Systems, Man and Cybernatics
- ➤ IEEE Transaction on Neural Networks and Learning Systems
- ➤ IEEE Journal of Biomedical and Health Informatics
- ➤ Computer Methods and Programs in Biomedicine (ELSEVIER)
- ➤ Biomedical Signal Processing and Control (ELSEVIER)
- ➤ Journal of Biomedical Informatics (ELSEVIER)
- > International Journal of Electronics and Communications (ELSEVIER)
- Journal of Medical Systems (Springer)
- ➤ Neural Computing and Applications (Springer)
- ➤ IAENG International Journal of Computer Science, Hong Kong
- > International Journal of Computer science & Systems Engineering, Australia
- International Journal of Open Problems in Computer Science & Mathematics, KSA
- ➤ International Journal of Computer Science & Emerging Technologies, UK
- ➤ WSEAS Transactions
- ➤ International Journal of non-standard & mass computing, Czech Republic (IF=0.5)
- ➤ International Journal of Systems Sciences (Taylor & Francis) (**IF=0.92**)
- International Journal of Artificial Intelligence & Expert Systems, Turkey.
- International Conference on Machine Learning and Computation, Singapore.
- ➤ WSEAS conferences (Included in ISI/SCI web of knowledge)
- International Conference on Future Information Technology, Singapore
- International Conference on Mechanical & Electrical Technology, China
- International Journal of Computer Technology, USA
- > Informatica, Lithuania
- Science Asia, Thailand
- ➤ Iranian Journal of Fuzzy systems
- ➤ International Journal of Electrical and Computer Engineering
- ➤ Journal of Intelligent and fuzzy systems, Netherlands (**IF=0.648**)
- > Asia-Pacific Journal of Ophthalmology
- > International Journal of Engineering and Research in Education
- International Journal of Health Information Sciences and Informatics, USA
- ➤ International Conference on Advanced Machine Learning Techniques and its Applications, Egypt.
- International conference on advances in computing, communications & informatics, India
- > Science and Information Conference 2013, 2014
- ➤ 6<sup>th</sup> International Workshop on Soft Computing applications, Romania

# E. FUNDED RESEARCH PROJECTS

S.No.	Title	Amount	Agency	Status
1	Developing Artificial Intelligence Based	INR 2.78	CSIR, New	Completed
	Software Tools for Screening of Diabetic	Lakhs	Delhi	
	Retinopathy in Retinal Images			
2	Developing software algorithm for	INR 10,000	Karunya	Completed
	character recognition in Braille		University	
	applications			
3	Enhancing the embedding capacity of	INR 15,000	Karunya	Completed
	image steganography approaches using		University	
	artificial intelligence approaches			
4	Design and development of an autonomous	INR 14.72	DST, New	Ongoing
	intelligent drone for city surveillance	Lakhs	Delhi	
5	Intelligent Transportation Systems	UK Pound	GCRF, Govt.	Ongoing
		35,000	of UK	

#### F. CONSULTANCY PROJECTS WITH INDUSTRIES

S.No.	Title	Amount	Industry	Duration
1	Heathcare Product Recommendation	INR 30, 000	Kanmalaitech	June 2019 –
	Systems using Machine Learning		Pvt. Ltd.,	September
	Techniques		Coimbatore,	2019
	_		India	

# **G. PROFESSIONAL MEMBERSHIPS**

- International Association of Computer Science and Information Technology (IACSIT) (Life member).
- International Association of Engineers (**IAENG**) (Life member).
- Indian Society for Technical Education (ISTE) (Life member).
- Index Copernicus (IC) Scientists.
- Machine Intelligence Research Labs, USA.
- Mentor of Interscience Research Networks (IRNET), India
- Association of Computer, Electronics and Electrical Engineers (ACEEE) (Life Member)
- Task Force on Deep Learning (IEEE CIS society)
- IEEE Systems, Man & Cybernatics Society (SMCS) TC on Soft Computing
- IEEE Computational Intelligence Society (CIS) TC on Neural Networks

# **CO- CURRICULAR ACTIVITIES**

# Courses/ Seminars/Workshops/Conferences organized

#### A) International Events

- Organizing Committee Member of "International Workshop" on "Internet of Things (IOT) Technology and Innovative Application Design", Beijing, China. 2010.
- **Publicity Chair of** "18<sup>th</sup> Online World Conference on Soft Computing" scheduled on Dec 1 to Dec 12, 2014.
- Organizing Committee Member of "International Conference" on "Electrical engineering and computer science", Bangkok, Thailand.
- International Programme Committee Member of "International Conference" on "Advanced Machine Learning Technologies and Applications", Cairo, Egypt.
- Organizing Committee Member of "International Conference" on "Intelligent Manufacturing and Computational Technology", Hong Kong, 2014.
- **Programme Committee Member** of "International Conference on Advances in Security of Information and Communication Networks", Egypt.
- **Programme Committee Member** of "International Workshop on: Biometrics: The Promising Information Security Trend, (BIST'13), Fukuoka, Japan.
- **Technical Programme Committee Member of** "Science and Information Conference 2013", London, UK.
- **Technical Committee Member of** "International Conference on Recent Trends and Innovations in Science and Technology, Thailand, 2014
- **International Advisory Committee Member of** "International Conference on Electrical Engineering, Computer Science and Informatics", Indonesia, 2014.
- **International Program Committee Member of "**11<sup>th</sup> International Conference on Genetic & Evolutionary Methods", USA, 2014.
- **International Program Committee Member of "** 16<sup>th</sup> International Conference on Artificial Intelligence", USA, 2014.
- **International Program Committee Member of** "18<sup>th</sup> International Conference on Image Processing, Computer Vision & Pattern Recognition", USA, 2014.
- **Technical Programme Committee Member of** "Science and Information Conference 2014", London, UK.
- **Technical Programme Committee Member of** "Future Technologies Conference", USA, 2016.
- **Technical Programme Committee Member of** "3<sup>rd</sup> International Conference on Artificial Intelligence", Ireland, 2016.
- **Scientific Committee Member of** "6<sup>th</sup> ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing (vipimage), Portugal, 2017.
- **Publicity Chair** of "3<sup>rd</sup> International Conference on Advanced Intelligent Systems and Informatics", Egypt, 2017.
- International Programme Committee Member of "Seventh International Workshop on Soft Computing Applications", Arad, Romania.
- **Technical Session chair** of "SLAAI-International Conference on Artificial Intelligence", Srilanka, 2018.

#### B) National Events

- **Programme Chair** of "**International Conference**" on "Advances in Electrical and Electronics Engineering", Cochin, India
- **Programme Chair of "International Conference"** on "Digital Signal Processing and Image Processing", Bhubaneshwar, Odisha, India.
- Organizing Committee Member of "International Conference" on "Advances in Electrical and Electronics Engineering", Bangalore, India.

- Programme Committee Member of "Special Session on Hybrid Intelligent Systems for Computer Vision and Pattern Recognition" in 12<sup>th</sup> International conference on Hybrid Intelligent Systems, Pune, India
- **Programme Chair** of "**International Conference**" on "Computer Science and Information Technology", Hyderabad, India (2014)
- **Programme Committee Member** of "International Conference on Advance Computing and Communication", Jharkhand, India
- **Programme Committee Member** of "International conference on Emerging Trends and Technology, Indore, India
- **Technical Session chair** of "International conference on Information Technology for Signal and Image Processing", Mumbai, India
- **Technical Session chair** of "International conference on software technology and computer engineering", Cochin, India
- **Publicity Chair of** "6<sup>th</sup> International Joint Conference on Advances in Engineering and Technology, New Delhi, India, 2015.
- **Technical Programme Committee Member of** "IEEE International Conference on Applied and Theoretical Computing and Communication Technology", Devanagare, India, 2015.
- **Technical Programme Committee Member of** "International Conference on Recent Advances and Innovation in Engineering", Jaipur, India, 2014.
- **Technical Programme Committee Member of** "First International Workshop on Nature Inspired Computing for Optimization and Management", Bhubaneshwar, India, 2016.
- Publication Chair of "International Conference on Innovative Computing and Communication" conducted by Guru Nanak Institute of Management, New Delhi, 2018.
- Area Chair of "International Conference on Recent Trends in Image Processing and Pattern Recognition" conducted by Solapur University, Maharashtra, India, 2018.

#### C) Local events

- **Programme Chair** of "**International Conference**" on "Computer Science and Information Technology", Coimbatore, India
- Organizing Secretary of "International Conference on Signal processing, Image processing and pattern recognition" scheduled on 7<sup>th</sup> and 8<sup>th</sup> February, 2013 at Karunya University.
- Organizing Secretary & Convenor of "International Conference on Signal processing and communication" scheduled on 28th and 29th July, 2017 at Karunya University.
- **Convenor** of "National Workshop on Infusing Research Attitude in Researchers" scheduled on 12<sup>th</sup> November, 2016 at **Karunya University.**
- Organized and Conducted a "Short Term Certificate Course" on "Matlab and its Applications" at Karunya University from August '08 November '08.
- Organized and Conducted an "Add-on course" on "Fundamentals of MATLAB" at Karunya University from November '11 February '12.
- Organizing Committee Member of "International Conference" on "Electronics and Communication Systems", Coimbatore, India.
- **Programme Chair** of "**International Conference**" on "Electrical Engineering and Computer Science", Coimbatore, India
- **Technical Session chair** of "International conference on electrical engineering and computer science", Coimbatore, India

- Organized and Conducted a "Short Term Certificate Course" on "Fundamentals of MATLAB" at Karunya University from July '12 October '12.
- **Technical chair of** "International conference on energy and power engineering", Coimbatore.
- **Technical session chair of** "International conference on innovations in intelligent instrumentation, optimization and signal processing", Coimbatore, India
- **Technical session chair of** "International conference on Electronics and Communication Systems", Coimbatore, India, 2014.
- **Technical session chair of** "International conference on Devices, Circuits and Systems", Coimbatore, India, 2014.
- **Programme Chair of** "International Conference on Communication, Computation and Cognition", Coimbatore, India, 2014.
- **International Technical Committee Member of** "International Conference on Computer Science and Engineering", India, 2014.
- **Technical Session chair** of "International conference on Electronic and Communication Systems", Coimbatore, India, 2016
- Advisory Committee member of "International conference on Trends in Electronics and Informatics", Tamilnadu, India, 2017.
- **Technical Session chair** of "International conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology", Coimbatore, India, 2017.
- **Technical Session chair** of "International conference on Advanced Technologies for Sustainable growth", Paavai College of Engineering, Coimbatore, India, 2017.
- **Technical Session chair** of "National conference on Future Communication Technologies", Karunya University, Coimbatore, India, 2017.

#### **Course/ Seminars/Workshops attended:**

- ♣ Participated in the **Quality Improvement Programme** on "*Instructional Design and Delivery*" conducted by the Technical Teachers' Training institute (**TTTI, Chennai**) at Regency institute of technology, **Yanam** from **12.05.2003 to 17.05.2003.**
- ♣ Participated in the **Faculty Development Programme** on "Conquering Inhibitions and Creativity in Teaching" organized by Karunya Institute of Technology, **Coimbatore** from **14.06.2004** to **15.06.2004**.
- 4 Attended a Workshop on "Teaching Technology and Counseling Skill" organized by Abirami Academy, Chennai at Regency Institute of Technology, Yanam from 26-07-2003 to 27-07-2003.
- ♣ Participated in the **Pedagogic Training Programme** at Karunya University, **Coimbatore** from **30-04-2007 to 04-05-2007.**
- ♣ Attended the **Induction Training Programme** at Pondicherry Engineering College, **Pondicherry** from **27-12-2002 to 07-01-2003**.
- 4 Attended an awareness programme on "Intellectual Property Rights" at Karunya University on 18-11-2011.
- → Attended a Faculty Development Programme (FDP) at Karunya University on 23-6-2016.

#### **Honours & Awards/Special Achievements**

- **Shiksha Rattan Puraskar**" Award for engineering by India International Friendship Society, New Delhi. (2012)
- **\*Bharat Excellence Award"** for outstanding contribution in research by Friendship forum, New Delhi. (2014)

- **Anna University** (All Colleges in Tamilnadu) 1<sup>st</sup> rank in M.E degree. (2006)
- Awarded "GOLD MEDAL" for outstanding performance in PG degree from MSEC, Sivakasi (2007)
- **BEST OUTGOING STUDENT** of the year 2002 (B.E)
- An article on my research paper is published as "TOP NEWS" in one of the weekly newsletter namely "Robotics and Machine Learning" (Page no:17, Vertical News) in **USA**.
- ♣ An article on my research paper is well acclaimed by the e-Newsletter namely "RETINA ONLINE", in USA.
- Received a Sponsorship of 150USD for my research article (Best Paper Category) from **Little Lion Scientific R&D**, **Pakistan** under Quality Research Promotion Initiative Scheme.
- Received a sum of 450USD from **Foundations of Computer Science**, **USA** towards its Research Funding Programme (RFP) for quality manuscripts.
- ♣ Biography selected for publication in the prestigious "MARQUIS WHO'S WHO" biographical Encyclopedia (USA, November 2009, 2014)

#### **Key Notes/Invited talks/Guest lectures**

#### A) International:

- Delivered a "Key note" on "Innovative Artificial Intelligence approaches for medical image analysis" in the International Conference on Artificial Intelligence in Mathematics and Engineering conducted by Suleyman Demirel University, Turkey on 20<sup>th</sup> April, 2019.
- Delivered a "Key note" on "Innovative Artificial Neural Networks and Fuzzy techniques for MR brain image classification" in the 3<sup>rd</sup> International Conference on Engineering and Technology conducted by Global Academic Research Institute, Srilanka on 22<sup>nd</sup> December, 2017.
- Delivered a "Guest Lecture" on "Novel Fuzzy algorithms for medical image classification" in the Faculty of Information Technology, University of Moratuwa, Srilanka on 21st December, 2017.
- Delivered a "Keynote Talk" on "Unconventional AI approaches for medical image analysis" in the "International Congress on health sciences and medical technologies" conducted by University of Tlemcen, Algeria on 21-23 October, 2018
- Delivered a "Keynote Talk" on "The boon and bane of soft computing techniques for medical applications" in the "SLAAI International Conference on Artificial intelligence" in the University of Moratuwa, Srilanka on 20<sup>th</sup> December, 2018.
- Delivered an "Invited Talk" on "Innovative Artificial Intelligence Techniques for MR brain image classification and segmentation" in the "18<sup>th</sup> online world conference on soft computing for industrial applications" on 2<sup>nd</sup> December, 2014.
- Delivered a "Keynote Talk" on "Role of AI in Education" in the "International conference on Interdisciplinary Education" conducted by Near East University, Cyprus on 20<sup>th</sup> June 2020.
- Delivered an "**Invited Talk**" on "Why Deep Learning approaches over conventional machine learning approaches? An introspection" (Webinar) conducted by Tribhuvan University, Kathmandu, Nepal on 1<sup>st</sup> August, 2020.
- Delivered a "Keynote Talk" on "Expectations of an editor of SCIE Journal from the authors" in the "International Multidisciplinary Conference on Current Research Trends" conducted by Research Circle Association, Malaysia on 20<sup>th</sup> September, 2020.
- Delivered a "Keynote Talk" on "Understanding the mystery behind deep learning- deep, deeper, deepest" in the "International Symposium on Bioinformatics and Biomedicine" conducted by Asen Zlatarov University, Bulgaria on 10<sup>th</sup> October, 2020.

Delivered a "Keynote Talk" on "Understanding the mystery behind deep learning- deep, deeper, deepest" in the "International Conference on Artificial Intelligence and Applied Mathematics in Engineering" conducted by Sulieman Demirel University, Turkey on 11th October, 2020.

#### **B)** National:

- ♣ Presented an "Invited Talk" on "Soft Computing and its Applications" at Sahrdaya College of Engineering, Kerala, India on 18.08.2008.
- **↓** Delivered a "Keynote Address" on "Unconventional Computing techniques for medical image analysis" during International Conference on Information Technology for Signal and Image Processing, Mumbai, India on 18.10.2013.
- ♣ Delivered a "Key note" on "Novel computing techniques for image processing applications" in the International Conference on Innovative Computing and Communication conducted by Guru Nanak Institute of Management, New Delhi on 5<sup>th</sup> May, 2018. (upcoming)
- **♣** Resource Person for the "Faculty Development Programme" on "Soft Computing Techniques" at Christian Engineering College, Oddanchatram, India on 29.04.2011 & 30.04.2011.
- ♣ Delivered an "Invited Talk" on "Fuzzy based Medical Image Analysis" during the CSIR sponsored seminar at P A College of Engineering and Technology, Pollachi, on 29/11/2013.
- ♣ Delivered a "Guest Lecture" on "Soft computing techniques for medical image analysis" in the "National Seminar on Computational Intelligence Techniques for biomedical signal and image processing" conducted by KPR Institute of Engineering and Technology, Coimbatore on 20<sup>th</sup> August, 2015.
- ♣ Delivered an "Invited Talk" on "Soft computing techniques for retinal disease identification" in the "DBT sponsored National Workshop on Computer Aided Diagnosis for Retinal Diseases" at Avinashilingam University, Coimbatore on 4th March, 2016
- ♣ Delivered a "Guest Lecture" on "Soft computing techniques for medical image analysis" conducted by VIT university, Vellore on 11<sup>th</sup> April, 2016.
- ♣ Delivered a "Guest Lecture" on "Cognitive Approaches for Therapeutic Applications" in the DBT sponsored National seminar on Molecular imaging in therapeutic applications conducted by Kongu engineering college, Erode on 29<sup>th</sup> July, 2016.
- ♣ Delivered a "Guest Lecture" on "Identification of Diabetic Retinal diseases using soft computing techniques" in the ICMR sponsored National seminar on Technologies for diabetic care and management conducted by Avinashilingam University, Coimbatore on 9<sup>th</sup> September, 2016.
- Delivered a "Key note" on "Cognitive Approaches- The 'x' dimension of image processing" in the IEEE International Conference on Communication and Electronic Systems conducted by PPG Institute of Technology, Coimbatore on 22<sup>nd</sup> October, 2016.
- ♣ Delivered a "Key note" on "The significance of soft computing approaches for practical applications" in the International Conference on Electrical, Electronics and Computer Engineering conducted by Vivekanandha College of Engineering for Women, Coimbatore on 8<sup>th</sup> March, 2017.
- ♣ Delivered a "Guest Lecture" on "Introduction to AI approaches a theoretical perspective" in the AI Expert Lecture Series conducted by Sri Krishna College of Engineering and Technology, Coimbatore on 21<sup>st</sup> August, 2017.
- Delivered a "Key note" on "Innovative Optimization Techniques for retinal image analysis" in the International Conference on Computational Vision and Bio Inspired Computing conducted by RVS Technical Campus, Coimbatore on 21st September, 2017.
- ♣ Delivered a "Guest lecture" on "Computer aided approaches for classification and segmentation of biomedical images" in the AICTE sponsored National seminar on

- **Biomaterials for Biomedical engineering applications** conducted by Karpagam College of Engineering on 9<sup>th</sup> October (Afternoon session), 2017.
- ♣ Delivered a "Guest lecture" on "AI based computational methodologies for Synthetic Aperture Radar (SAR) image analysis" in the CSIR sponsored National workshop on Computational and Mathematical Challenges in Radar and Seismic Technology conducted by P A College of Engineering and Technology on 12<sup>th</sup> October, 2017.
- **↓** Delivered a "Guest Lecture" on "Skin image classification using machine learning approaches" in the ICMR sponsored National Seminar on Recent trends in skin and lung image analysis conducted by Kalaignar Karunanidhi Institute of Technology on 5<sup>th</sup> January, 2018.
- **↓** Delivered a "Guest Lecture" on "Challenges in Artificial Intelligence approaches towards biomedical applications" in the ICMR sponsored National Seminar on "Innovations and Challenges in development of future biomaterials and smart medical devices" conducted by Hindusthan College of Engineering and Technology on 19<sup>th</sup> January, 2018.
- ♣ Delivered a "**Keynote talk**" on "**Novel AI approaches for medical image analysis**" in "**MULTICON-W**" conducted by Tagore College of Engineering and Technology, Mumbai on 22<sup>nd</sup> February, 2019.
- **↓** Delivered a "**Keynote talk**" on "**The role of AI in medical applications**" in "**International Conference on Advanced Computing Technology**" conducted by SRM University, Chennai on 23<sup>rd</sup> January, 2020.
- Delivered an "Invited Talk" on "Modified ANN for medical image analysis" in "DST sponsored 2-week Faculty Development programme" conducted by PSG College of Technology, Coimbatore on 30<sup>th</sup> January, 2020.
- ♣ Delivered an "Invited Talk" on "Role of a researcher in today's scenario" in "International Conference on Electrical Sciences" conducted by SNS College of Technology, Coimbatore on 20<sup>th</sup> February , 2020.
- Delivered an "Invited Talk" on "The ART of writing research paper" in "Webinar Series" conducted by Excel College of Engineering, Salem on 28<sup>th</sup> April, 2020.
- ♣ Delivered an "Invited Talk" on "Methods for efficient journal writing" in "Webinar Series" conducted by Gandhi Institute of Engineering and Technology, Odisha on 1<sup>st</sup> May , 2020.
- ♣ Delivered an "Invited Talk" on "The expectation of SCIE journals from authors" in "Webinar Series" conducted by Sona College of Technology, Salem on 9<sup>th</sup> May , 2020.
- **Resource Person** for the "5-day FDP on Deep learning and Machine Learning" (**Webinar**) conducted by SRM University, Chennai from 27<sup>th</sup> May 31<sup>st</sup> May , 2020.
- Delivered an "**Invited Talk**" on "Deep Learning and Transfer Learning methods for COVID19 detection from lung images" in "4-day FDP (**Webinar**)" conducted by Velammal College of Engineering and Technology, Madurai on 8<sup>th</sup> June, 2020.
- ♣ Delivered an "**Invited Talk**" on "Nuts and Bolts of an effective scientific research manuscript" (Webinar)" conducted by New Horizon College of Engineering, Bangalore on 16<sup>th</sup> June, 2020.
- → Delivered an "Invited Talk" on "Medical Decision Support Systems using computational intelligence approaches" (Webinar) conducted by Hindustan College of Engineering and Technology, Coimbatore on 15<sup>th</sup> June, 2020.
- → Delivered an "Invited Talk" on "The ART of writing research papers" (Webinar) conducted by SRM University, Chennai on 4th July, 2020.
- Delivered an "Invited Talk" on "Deep learning and transfer learning techniques for COVID19 detection from lung images" (Webinar) conducted by Bharati Vidyapeeth's College of Engineering, New Delhi on 6th July, 2020.
- ♣ Delivered an "**Invited Talk**" on "Deep learning and transfer learning techniques for COVID19 detection from lung images" (Webinar) conducted by SRM University, Chennai on 21<sup>st</sup> July, 2020.

- ♣ Delivered an "Invited Talk" on "Deep learning and transfer learning techniques for COVID19 detection from lung images" (Webinar) conducted by SRM University, Chennai on 21<sup>st</sup> July , 2020.
- ♣ Delivered an "Invited Talk" on "Understanding the mystery behind deep learning- deep, deeper, deepest" (Webinar) conducted by Dr. NGP Institute of Technology, Coimbatore on 18<sup>th</sup> July , 2020.
- ♣ Delivered an "Invited Talk" on "Medical Decision Support Systems using deep learning approaches: A Comprehensive Description" (Webinar) conducted by KPR Institute of Engineering and Technology, Coimbatore on 24<sup>th</sup> July , 2020.
- → Delivered an "Invited Talk" on "Medical Decision Support Systems using computational intelligence approaches: A Comprehensive Description" (Webinar) conducted by Sri Ramakrishna Engineering College, Coimbatore on 21st August, 2020.
- ♣ Delivered an "Invited Talk" on "Understanding the mystery behind deep learning approaches deep, deeper, deepest" at ATAL -FDP conducted by Sri Krishna College of Engineering and Technology, Coimbatore on 4<sup>th</sup> September , 2020.
- ♣ Delivered an "Invited Talk" on "Understanding the mystery behind deep learning approaches deep, deeper, deepest" at IEEE Webinar conducted by Kalasalingam University, Srivillipudur on 6<sup>th</sup> September, 2020.
- ♣ Delivered an "Invited Talk" on "Nuts and Bolts of an Efficient Scientific Research Manuscript" at AICTE sponsored STTP conducted by Government College of Technology, Coimbatore on 7<sup>th</sup> September, 2020.
- → Delivered an "Invited Talk" on "Medical Decision Support Systems using computational intelligence approaches: A Comprehensive Description" (Webinar- SERIES 2) conducted by Sri Ramakrishna Engineering College, Coimbatore on 25th September, 2020.
- → Delivered an "Invited Talk" on "Why Deep Learning techniques over traditional machine learning techniques? A practical introspection" in AICTE sponsored STTP conducted by Sri Krishna College of Engineering and Technology, Coimbatore on 13th October, 2020.
- ♣ Delivered an "Invited Talk" on "Methodology of Writing Proposals" in the "Workshop for Writing Research Proposals" at Karunya University, India on 13/2/2013.
- **♣** Delivered an "Invited Talk" on "Successful Research Proposals" in the "Workshop for Writing Research Proposals" at Karunya University, India on 20/2/2013.
- ♣ Delivered an "Invited Talk" on "The art of writing research papers" as part of ECE Association Inauguration at Karunya University, India on 25/7/2013.
- Resource Person for the National Level Workshop on "Evolutionary Optimization Techniques for Solving Multi Disciplinary Research Problems", at Karunya University, on 6 &7 December 2013.
- Delivered an "Invited Talk" on "Neural networks and fuzzy techniques for medical image classification and segmentation" in the National Workshop on "Applications of advanced learning techniques for medical image diagnostics" at Karunya University on 14<sup>th</sup> and 15<sup>th</sup> February, 2014
- **Resource Person** for the **National Workshop** on "Soft Computing Techniques for Power Electronics Applications", at Karunya University, on 15<sup>th</sup> March, 2014.
- ♣ Delivered an "Invited Talk" on "The art of writing research papers" in the "National Workshop on Computer Vision and Image Analysis" conducted by Karunya University, Coimbatore on 13<sup>th</sup> February, 2015.
- Resource Person (Panel Discussion Member) for the "Research Colloquium: Eye for an excellence" conducted by Karunya University on 27th February, 2016.
- ♣ Delivered an "Invited Talk" on "Soft computing techniques and image analysis" in the "National Workshop on Soft Computing Techniques and R-Programming" at Karunya University, Coimbatore on 9<sup>th</sup> March, 2016.

- Delivered a "Guest lecture" on "The art of writing research papers" in the Workshop on Writing Research Papers using LATEX conducted by Karunya University on 9<sup>th</sup> October (Forenoon session), 2017.
- ♣ Delivered a "Guest lecture" on "Genetic Algorithm implementation using MATLAB" in the National workshop on Mathematical Modelling, Optimization and Simulation conducted by Karunya University on 27<sup>th</sup> November, 2017.
- ♣ Delivered a "Guest lecture" on "Deep learning for pattern recognition applications" in the National workshop on Deep learning and computer vision conducted by Karunya University on 7<sup>th</sup> April, 2018.
- Delivered a "Guest lecture" on "Machine intelligence for scalable systems" in the AICTE sponsored Faculty Development Programme on Machine Intelligence conducted by Sri Krishna College of Engineering and Technology, Coimbatore on 20<sup>th</sup> June, 2018.
- Delivered a "Guest lecture" on "Practical perspectives of Genetic Algorithm and Particle Swarm optimization" in the NITTR sponsored National Seminar on "Optimization Techniques" conducted by Sri Krishna College of Engineering and Technology, Coimbatore on 23<sup>rd</sup> January, 2019.
- Delivered a "Guest lecture" on "Introduction to Artificial Neural Networks" in the CSIR sponsored National Workshop on Neural Networks for Wind Energy Estimation conducted by P A College of Engineering and Technology, Pollachi on 14<sup>th</sup> February, 2019.
- ♣ Delivered a "Guest lecture" on "Innovative Artificial Intelligent Techniques for Retinal Image Classification" in the CSIR sponsored National Seminar on "Computer aided diagnosis of retinal images using machine learning techniques Innovations and Research perspectives" conducted by Kongu Engineering College, Coimbatore on 14<sup>th</sup> June, 2019.
- ♣ Delivered a "Guest lecture" on "Learning and Adaptive Soft Robots Design" in the NITTR sponsored short term course on Haptic Technology" conducted by Sri Krishna College of Engineering and Technology, Coimbatore on 13<sup>th</sup> June, 2019.
- ♣ Delivered a "Guest lecture" on "Artificial Intelligence: A boon or bane?" in the National level technical symposium" conducted by ECE Department, Mahendra Institute of Technology, Namakkal on 6<sup>th</sup> September, 2019.
- ♣ Delivered a "Keynote Talk" on "Fuzzy logic techniques for medical image analysis" in the "2<sup>nd</sup> International Conference on Intelligent Data Communication Technologies and Internet of Things" at JCT college of engineering, Coimbatore on 12<sup>th</sup> September, 2019.

#### **Countries Visited:**

Name of the Country	<u>Institution</u>	<u>Remarks</u>
Srilanka	University of Moratuwa, Srilanka	• Delivered an Invited
		Talk in the Faculty of
		Information Technology
		in University of
		Moratuwa, Srilanka
		<ul> <li>Delivered a keynote talk</li> </ul>
		in the SLAAI-
		International Conference
		on Artificial Intelligence
Turkey	Suleyman Demirel University,	<ul> <li>Delivered a keynote talk</li> </ul>
	Turkey	in the International
		Conference on Artificial
		Intelligence and
		Mathematics in

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l Engineering
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# **Collaborative Research Labs:**

Name of the Lab	Country	Projects involved
Computational Intelligence and	Argentina	"HOLOTECH" – Obstacle detection for
Information Systems (CI <sup>2</sup> S) Lab		blind people using computational
-		intelligence and image processing techniques
RIADI Laboratory, National School of	Tunisia	Artificial Intelligence approaches for
Computer Sciences, University of		tackling computational complexity in
Manouba		practical imaging applications
Laboratório De Processamento De	Brazil	Medical image processing, Text data
Imagens, Sinais E Computação Aplicada		processing and Pattern recognition
Research Centre for Applied	Romania	Novel deep learning algorithms for market
Intelligence, University of Craiova,		prediction/business applications
Romania		

# **Other Research Activities:**

- Department Advisory Committee (DAC) member of Department of Biomedical Engineering, Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu, India (2019-20, 2020-21, 2021-22)
- Department Advisory Committee (DAC) member of Department of EIE, Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu, India (2019-20, 2020-21, 2021-22)
- Doctoral Committee member of Ph.d Scholars:
  - ✓ Anna University 25
  - ✓ Karunya University -12
- Completed NPTEL Online course on "Digital Image Processing" from IIT, Kharagpur (86%, Elite group)

# **Contact Address**

Associate Professor (ECE), Karunya University, Karunya Nagar, Coimbatore.