




SRM TRP Engineering College, Trichy
Department of Electronics & Communication
Engineering



Faculty Profile

Name	: Dr.C.Chellaswamy			
Date of Birth	: 30-06-1972			
Highest Qualification	: PhD			
Date of Joining	: 01-12-2021			
Designation	: Professor			
Date of promotion (Present Designation)	: -			
Area of Interest	: Renewable energy, IoT based system, Image processing, & VLSI design			
Mobile No	: +91 8778348550	Email ID	: drchellaswamy@gmail.com	
Experience	: Teaching : 26	Industry	: 2	Research : 12
Address (for Communication)	: No.22, Hari Avenue, Mangadu, Chennai. 600122			

Association with Professional Bodies

Name (Professional Body)	IEI	ISTE	IAENG
Type of Membership	Fellow	Life member	Member
Membership No.	F-126049-5	LM-124833	299509

Research

Ph. D Guidance					
Supervisor / Guide ship No. :	4040060	University :	Anna University	No. of Scholars :	3
Publication					
International Journals	: 45	National Journals	:	2	
International Conference	: 34	National Conference	:	2	
Reviewer					
Journals	: 14	Conferences	:	5	
Project Grants (Research projects guided or undertaken/ Sponsored Projects)					
Received (Amount)	: 27,000	Applied (Amount)	:	40,000	
Patent					
Published	: 2	Granted	:	1	

Books

Published	: 6
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FDPs / STTPs / Workshops / Seminars etc.,

FDP		STTP		Workshop		Seminar		Others	
Attended :	12	Attended :	25	Attended :	15	Attended :	13	Attended :	
Organized :	4	Organized :	4	Organized :	2	Organized :	2	Organized :	

Online courses (NPTEL, MOOC etc.)	2
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***List of Publications :**

14. T. S. Geetha, C. Subba Rao, **C. Chellaswamy**, K. Uma Maheswari, "Enhancing Remote Target Classification in Hyperspectral Imaging using Graph Attention Neural Network", *Journal of Earth System Science*, 133, 2024. <https://doi.org/10.1007/s12040-024-02294-3> (**SCI Indexed, Impact Factor: 1.9**)
13. T. S. Geetha, **C. Chellaswamy**, E. Raja, K. Venkatachalam, "Deep Learning for River Water Quality Monitoring: A CNN-BiLSTM Approach along the Kaveri River", *Sustainable Water Resource Management*, 10, 2024. <https://doi.org/10.1007/s40899-024-01102-6> (**SCI Indexed, Impact Factor: 2.1**)
12. T. S. Geetha, **C. Chellaswamy**, T. Kaliraja, "Optimized convolutional neural network-based temperature and refractive index fiber optic sensor", *Journal of Optics*, 2024. <https://doi.org/10.1007/s12596-024-01887-x> (**SCI Indexed, Impact Factor: 1.8**)
11. T. S. Geetha, C. S. Rao, **C. Chellaswamy**, "Crowd Movement Monitoring in Academic Buildings: A Reinforcement Learning Approach", *Multimedia Tools and Applications*, 1-31, 2024. <https://doi.org/10.1007/s11042-024-19041-x> (**SCI Indexed, Impact Factor: 3.6**)
10. **C Chellaswamy**, M Muthu Manjula, B Ramasubramanian, A Sriram, "FPGA-based remote target classification in hyperspectral imaging using multi-graph neural network", *Microprocessors and Microsystems*, 105, 2024, 105008, <https://doi.org/10.1016/j.micpro.2024.105008>. (**SCI Indexed, Impact Factor: 2.6**)
9. C Subba Rao, **C Chellaswamy**, T. S Geetha, S Arul, "Deep Learning Based Decision Support Framework for Dead Reckoning in Emergency Vehicle Preemption", *Int. J. ITS Res.* 2024. <https://doi.org/10.1007/s13177-023-00384-y>. (**SCI Indexed, Impact Factor: 2.1**)
8. **C. Chellaswamy**, Rao, C.S, Geetha, T.S. "Performance study of crowd flow in academic buildings of an institution", *CCF Trans. Pervasive Comp. Interact.* 5, 367-381, 2023. <https://doi.org/10.1007/s42486-023-00134-9> (**SCI Indexed, Impact Factor: 2.1**)
7. R Ganesh Babu, **C. Chellaswamy**, T S Geetha, "Actor-critic learning-based adaptive fuzzy controller for stepper motor", 45(15), 1-17, 2023. <https://doi.org/10.1177/01423312231156970> (**SCI Indexed, Impact Factor: 1.8**)
6. **C. Chellaswamy**, T. S. Geetha, P. Thiruvalar Selvan, A. Arunkumar, "6-phase DFIG for wind energy conversion system: A hybrid approach", *Sustainable Energy Technologies and Assessments*, 53, Part B, 2022, 102497, (**SCI Indexed, Impact Factor: 7.5**) <https://doi.org/10.1016/j.seta.2022.102497>.
5. T. S. Geetha, V. Amudha, **C. Chellaswamy**, "A Novel Dynamic Capacity Expansion Framework Includes Renewable Energy Sources for an Electric Vehicle Charging Station", *International Transactions on Electrical Energy Systems*, 2022, Article ID 4813750. (**SCI Indexed, Impact Factor: 3.5**) <https://doi.org/10.1155/2022/4813750>
4. R. Ganesh Babu, **C. Chellaswamy**, T. S. Geetha, R. Ramesh, "Fibre optic sensor based multi-gas detection using optimized convolutional neural network", *Journal of Modern Optics*, 403-417, 2022, (**SCI Indexed, Impact Factor: 1.3**) <https://doi.org/10.1080/09500340.2022.2041753>
3. A.S. Monikandan, **C. Chellaswamy**, T. S Geetha, S. S. Sivaraju, "Optimized Convolutional Neural Network-Based Capacity Expansion Framework for Electric Vehicle Charging Station", *International Transactions on Electrical Energy Systems*, 2022, Article ID 2915910. (**SCI Indexed, Impact Factor: 3.5**) <https://doi.org/10.1155/2022/2915910>
2. B. R Ganesh, C. Chellaswamy, "Different stages of disease detection in squash plant based on machine learning", *Journal of Biosciences* 47 (1), 2022. (**SCI Indexed, Impact Factor: 2.9**)
1. C Subba Rao, T S Geetha, **C Chellaswamy**, S Arul, "Optimized convolutional neural network-based multigas detection using fiber optic sensor", *Optical Engineering* 60 (12), 127108-127108, 2021. (**SCI Indexed, Impact Factor: 1.3**)

International Conference

2. Krishnan T, Nandhu M, Kumar R.K, Asokan J, Chellaswamy C, Ramasubramanian B, "Bird repeller for agriculture lands and orchards", AIP Conference Proceedings, 2023, 2888(1), 020003. <https://doi.org/10.1063/5.0164559>
3. C. Chellaswamy, T. S. Geetha, K. Hariharan, A. Dhelipan Raj, K. Archana, Babitharani S, "Deep Learning-Based Braille Technology for Visual and Hearing Impaired People", International Conference on Smart Systems for applications in Electrical Sciences (ICSSES), Tumakuru, India, 2023, pp. 1-8, doi: 10.1109/ICSSES58299.2023.10199935.
4. C. Chellaswamy, Geetha T. S, R. B, D. R. A, D. S and K. K, "Smart River Water Quality and Level Monitoring: a Hybrid Neural Network Approach," 2023 International Conference on Advances in Intelligent Computing and Applications (AICAPS), Kochi, India, 2023, pp. 1-6, DOI: 10.1109/AICAPS57044.2023.10074495.
5. C. Chellaswamy, T. S. Geetha, B. Ramasubramanian, R. Abirami, B. Archana and A. Divya Bharathi, "Optimized Convolutional Neural Network based Multiple Eye Disease Detection and Information Sharing System," 6th International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2022, pp. 1105-1113, DOI: 10.1109/ICICCS53718.2022.9788334.

Book Chapter

6. C. Chellaswamy, P. Thiruvallar Selvan, S. Markkandan, T. S. Geetha, "Brain Tumor Segmentation Utilizing MRI Multimodal Images with Deep Learning," CRC Press, 2023. DOI: 10.1201/9781003277002
7. C.Chellaswamy, K. Aiswarya, J. Asokan, "An Efficient Deep Learning Approach for Brain Stroke Detection Application of Telemedicine," CRC Press, 2023 DOI: 10.1201/9781003307778
8. C. Chellaswamy, A. Sriram, T. S. Geetha, S. Arul, "Federated Learning (FL) with Internet of Things (IoT)-Powered Cooperative Communication for Smart System," CRC Press, 2024. DOI: 10.1201/9781003434269