


<b>Name:</b>	 R. Geetha			
<b>Designation:</b>	Assistant Professor CSE(AI&ML)			
<b>Qualification:</b>	B.E., M.E., (Ph. D)			
<b>Area of specialization:</b>	Artificial Intelligence, Machine Learning, Signal and Image Processing			
<b>Experience:</b> (As on JAN 2025)	<b>Industrial</b>	<b>Research</b>	<b>Teaching Experience</b>	
	-	6 Years	10 Years	
<b>Number of workshop / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	12		12	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	National	International	National	International
	3		2	
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	-		-	
<b>Professional Body Membership:</b>	Life member in THE INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE)			
<b>Achievements:</b>				
<b>Books:</b>	<ol style="list-style-type: none"> <li>Geetha R., Priya E. (2022) "Index for Assessment of EEG Signal in Ischemic Stroke Patients". In: Sivasubramanian A., Shastry P.N., Hong P.C. (eds) Futuristic Communication and Network Technologies. Lecture Notes in Electrical Engineering, vol 792. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-4625-6_82">https://doi.org/10.1007/978-981-16-4625-6_82</a>. (Indexed in EI Compendex and Scopus) 12 October 2021 eBook ISBN: 978-981-16-4625-6.</li> <li>Geetha R., Priya E. (2021) "Optimization-based multilevel threshold image segmentation for identifying ischemic stroke lesion in brain MR images". In: Handbook on Decision Support Systems for neurological disorders, Hemanth Jude (editor), Elsevier, Academic Press, ISBN: 9780128222713 (Scopus indexed) 9th April 2021 DOI: 10.1016/B978-0-12-822271-3.00005-0</li> <li>Geetha R., Priya E. (2021) "Brain MR Image Lesion Identification Using</li> </ol>			

Threshold-Based Segmentation Techniques”. In: Komanapalli V.L.N., Sivakumaran N., Hampannavar S. (eds) Advances in Automation, Signal Processing, Instrumentation, and Control. Lecture Notes in Electrical Engineering, vol 700. Springer, Singapore. [https://doi.org/10.1007/978-981-15-8221-9\\_264](https://doi.org/10.1007/978-981-15-8221-9_264). (Indexed in EI Compendex and Scopus) ISBN-10: 9811582203

### **Publication in Journals:**

1. Geetha R, Priya E and Kavitha Sivakumar (2024), “Automated diagnosis of acute cerebral ischemic stroke lesions from diffusion weighted magnetic resonance images in assessment with modified Rankin Scale” Journal of intelligent & Fuzzy systems (indexed in Science Citation Index Expanded (SCIE)), H index-73, IF: 2. Publisher: IOS Press BV. ISSN online: 1875-8967. DOI:10.3233/JIFS-233883 19th April 2024.
2. Geetha, R., Priya, E., & Vijayakumar, M. (2025). “An approach for automated acute cerebral ischemic stroke lesion segmentation and correlation of significant features with modified Rankin Scale. Biomedical Signal Processing and Control”, (indexed in Science Citation Index (SCI)), H index-94, IF:4.9, Publisher: Elsevier BV, 100, 106921. <https://doi.org/10.1016/j.bspc.2024.106921>.

### **Publication in Conferences:**

1. R. Geetha and E. Priya (2020), “Index for assessment of EEG signal in ischemic stroke patients”, Virtual International Conference on Futuristic Communication and Network Technologies (VICFCNT 2020) held on 6th and 7th November 2020 at Vellore Institute of Technology, Chennai. 7th November 2020.
2. R. Geetha and E. Priya (2020), “Brain MR Image Lesion Identification using Threshold-based Segmentation Techniques”, International Conference on Automation, Signal Processing, Instrumentation and Control (iCASIC 2020) held on 27th, 28th February at Vellore Institute of Technology, Vellore.

### **Paper presentation at National and International level:**

1. Presented the paper titled “Nonlinear Constrained PI control Applied to Heavy oil Fractionators Columns” Retina’05, 21st and 22nd December 2005, National Engineering College, Kovilpatti.
2. Presented the paper titled “Image Registration Technique for Image Fusion Application” Retina’05, 21st and 22nd December 2005, National Engineering College, Kovilpatti.
3. Presented the paper titled “Nonlinear Constrained Predictive Control Applied

to Heavy oil Fractionators Columns” Dec2007, St. Joseph’s College of Engineering, Chennai.

4. Attended and co-authored the paper titled “Electromechanical energy conservation using Cantilever beam” NCES’14, 21st March 2014, Indira Institute of Engineering & Technology.
5. Attended and co-authored the paper titled “Sensor Fusion Implementation in Ambulance Rescue System” 21st March 2014, Indira Institute of Engineering & Technology.

#### **Seminar/Workshop/Short course Organized:**

1. Organized National Level Technical Symposium DERROCHE 2K15 on 14th August 2015 in the Department of Electronics and Instrumentation Engineering, Sri Sairam Engineering College, Chennai.

#### **Workshop Details:**

1. Attended online workshop titled “Emerging Trends in Academic Writing and Publication” hosted by SHODH, Panjab University, Chandigarh, January 11, 2024.
2. Attended a Two days’ workshop on “CURIOUS PROGRAM” conducted by IITM HTIC MedTech Incubator at Healthcare Technology Innovation Centre, IITM Research Park, Chennai on 17th and 18th October, 2019.
3. Attended two days’ workshop on Advancements in Biomedical Signal and Image processing sponsored by UGC-DRS-II2015-2016 and organized by the Department of Electronics Engineering, MIT Campus, Anna University, Chrompet, Chennai-44 during 29th & 30th October 2015.
4. Attended National workshop on Biomedical Signal Acquisition and Conditioning (BISAC2015) held from 17th to 19th 2015 at Amrita School of Engineering, Coimbatore.
5. Attended the two days’ workshop on the topic PIC controller based Embedded system Design organized by the Department of Electronics and Instrumentation Engineering, Sri Sairam Engineering College on February 28th & 29th, 2012.
6. Attended the one-day workshop on the topic Nano Technology organized by the Department of Electronics and Instrumentation Engineering, Kamaraj College of Engineering & technology on 27th February, 2008.
7. Attended the one-day workshop on the topic PLC Programming organized by the Department of Electronics and Instrumentation engineering, Kamaraj College of Engineering & technology on 24th July, 2007.
8. Attended the one-day workshop on the topic Image Processing with IDL Programming organized by the Department of Information Technology Kamaraj College of Engineering & technology on 21st September 2007.
9. Attended the one-day workshop on the topic Ignite the minds of Bio signal

Engineers towards Research organized by the Department of Electronics and Instrumentation Engineering, National Engineering College, Kovilpatti on October 2nd 2007.

10. Attended the one-day workshop on the topic Embedded System Design with 8051, PIC & ARM organized by the Department of Electronics and Instrumentation Engineering, National Engineering College, Kovilpatti on October 15th 2007.
11. Attended the one-day workshop on the topic Continuing Education on Instrumental Methods For Film Analysis & Testing (IMFAT-2006) organized by the Department Of Polymer Technology, Kamaraj College of Engineering & technology on 16<sup>th</sup> November 2006.
12. Attended the one-day workshop on the topic Embedded System organized by the Department of Electronics and Instrumentation engineering, Kamaraj College of Engineering and technology on 2nd September, 2005.

#### **FDP Details:**

1. Participated in 5 days Online Faculty Development Programme on “Frontiers of Machine Learning and Deep Learning: Fundamentals and case studies in Signal Processing Computer Vision and Medical Imaging Applications” from 20.05.2024 to 24.05.2024 organized by Department of Electronics and Communication Engineering CMR Institute of Technology, Bengaluru, India.
2. Participated in a 40 hours Faculty Development Programme on “Optimization Technique for Engineering Applications” sponsored by Ministry of Electronics and Information Technology (Meity), GOI organized by E&ICT Academy, NIT Warangal and Department of Computer science & Engineering, NIT Warangal, Telangana State during 11th – 22nd March, 2024.
3. Participated in the ISTE sponsored 3 days Faculty development programme on “Emerging research trends in artificial intelligence and internet of things from 7.2.2024 to 09.2.2024.
4. Participated in the faculty Development Program on “TRICKS AND TECHNIQUES FOR RESEARCH ARTICLE & THESIS WRITING USING MODERN E-TOOLS” ". on 2nd August 2023 jointly organized by Mechanical engineering Department of Baslios Mathews II College of Engineering and IEI Kollam Local center.
5. Participated in the IEEE Madras Section Sponsored 5 days Faculty Development Program (Hybrid Mode) on “Emerging Trends in artificial Intelligence and Deep Learning” organized by Department of Electronics and Communication Engineering held from 26.12.23 to 30.12.23.
6. Attended a six days short term training programme on ‘Artificial intelligence and Deep learning Techniques’ (slot-II) from 1.2.2021 to 6.2.2021 organized by department of information technology, B.S. Abdul Rahman Crescent Institute of Science & Technology, Chennai, Tamil Nadu.

7. Attended a Two weeks online FDP on “Computer Vision and Image Processing: Research issues, Innovation and Application” conducted by the Department of Electronics and Communication Engineering, PSNA College of Engineering and Technology, Dindigul, during 10.02.2021 to 23.02.2021 (phase III).
8. Attended a short-term course on “Advances in Medical Imaging” from 15.3.2021 to 19.3.2021 organized by DST funded I-DAPT HUB Foundation a Technology Innovation Hub on Interdisciplinary Data Analytics and Predictive Technology (IDAPT) at IIT(BHU) Varanasi, set up under National Mission on Interdisciplinary Cyber Physical System.
9. Attended a Three days FDP on “Medical Signal and Image Analysis” held from June 15th to June 17th, 2020 conducted by St. Joseph’s College of Engineering, Chennai.
10. Attended a Three days online FDP on “Get Ready for AI with MATLAB and SIMULINK” held from June 18th to June 20th, 2020 conducted by Sri Sairam Engineering College, Chennai.
11. Attended a One week online Short-Term Training Programme (STTP) on “Research issues and challenges in Deep learning based Medical image analysis and Medical diagnosis (Series: 01)” organized by Sri Ramakrishna Engineering College, Coimbatore from August 17th to 22nd, 2020.
12. Participated in Faculty Development Programme on “Embedded Smart Power System & Power Electronics” organized by department of Electrical & Electronics Engineering, K.L.N college of Information Technology on 18th & 19th December 2007.