Dr.V.Kalaivani M.E.,Ph.D., **Professor and HOD** Department of Artificial Intelligence and Data Science National Engineering College Kovilpatti – 628503 Tamilnadu, India, Email: hodai@nec.edu.in



### **EXPERIENCE**

#### Experience in National Engineering College, Kovilpatti: 24 Years

Professor & HOD	30.09.2022 to Till Date
<ul><li>Professor</li></ul>	13.07.2015-29.09.2022
<ul> <li>Associate Professor (SG)</li> </ul>	13.02.2012-12.07.2015
Associate Professor	10.06.2010-12.02.2012
<ul> <li>Sr. Lecturer</li> </ul>	22.05.2006-09.06.2010
<ul> <li>Lecturer</li> </ul>	12.06.1997-31.05.1999, 11.06.2000-21.05.2006

### **EDUCATION**

Ph.D

2011, Faculty of ICE, Anna University Chennai, thesis title, "Design and Development of E-Learning and Semantic Search Engine"

M.E

2002, CSE, National Engineering College, Kovilpatti, I Class with Distinction, University Rank Holder

B.E

1996, ICE, AKCE, Krishnan coil, I Class with Distinction, University Rank Holder

#### **RESEARCH INTERESTS**

### Web Mining, Medical Image Analysis, Data Mining

### **COURSES TAUGHT**

Data Mining, Internet of Things, Internet Programming, Design and Analysis of Algorithms, Computer Organization and Architecture, Web Technology, Advanced Databases, XML and Web Services, Pattern Recognition, Distributed Computing, Mobile Pervasive Computing.

#### **SUPERVISOR RECOGNITION**

Recognized Supervisor in Anna University, Chennai, since May 2014. No of Ph.D awarded : 3, Thesis Submitted : 1, PhD Scholars in progress : 2

### **RESEARCH FUNDED PROJECTS/SEMINARS**

- Principal Investigator for the Research Project funded by Institution of Engineers(India), Kolkatta titled "Automated weed eradication system using embedded techniques" and the sanctioned amount is Rs.60,000/- during 2017-18.
- 2. A research funded project titled "Integrating Cardiovascular Sounds and ECG for Cardiac diagnosis" has been recommended by Indian Council of Medical Research, New Delhi for providing the financial assistance of Rs.14,52,392/.
- Fund Rs.2,05,000 is received from IEEE, TCS, BRNS, ISRO for organizing IEEE International Conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE'16) during 7-9, January 2016.
- Funded by AICTE, for organizing National level online Conference on "Data Science and Intelligent and Information Technology" during 14.05.2021 & 15.05.2021.
- Grant received CSIR for organizing "Two days 9<sup>th</sup> National Conference on Image Processing and Networking "NACIPAN'13" 01.03.2013 & 02.03.2013.
- 6. Grant received from Department of Science and Technology for conducting "Two days National seminar on Research Issues and Challenges in Cognitive Science" from 01.02.1013 and 02.02.2013.
- Grant received from Anna University, Chennai for conducting "Two weeks Faculty Development Training Programme" on "Web Technology" from 07-11-2005 to 19-11-2005

# Consultancy

Consultancy work is carried out from M/s Embris Global Solutions, Chennai for Automation of robot systems during April 2021 – Feb, 2022

# **Expert Lecture Delivered**

Sl.No	Title	Venue	Date
1.	AICTE sponsored National level online Conference on <b>Data</b> <b>Science and Intelligent and</b> <b>Information Technology,</b> Chair Person	National Engineering College	14.05.2021 & 15.05.2021
2.	Data Visualization using Tableau	National Engineering College	18.02.2021
3.	R Programming Language	National Engineering College	23.05.2020
4.	International Conference,IConRAEECCE'19, Chair Person	Mepco Schlenk Engineering College, Sivakasi	06.12.2019
5.	Big Data Analytics with R Programming	Sri Vidya College of Engineering & Technology, Viruthunagar.	10.09.2019
6.	Dynamic Programming: Coin Changing problem, Computing binomial Coefficient, Optimal Binary Search tree & Applications	Anna university sponsored FDTP, NEC,Kovilpatti	29.11.18 & 30.11.18
7.	Forest Fire Detection System	National Institute of Technology(NIT), Calicut, Kerala	26.02.2018
8.	Interactive Machine Translation	CIIL,NEC,Kovilpatti	06.10.2016
9.	Medical Data Mining	APC Govt. College, Tuticorin.	14.09.2015
10.	Service Oriented Architecture	IT Department, NEC, Kovilpatti	09.06.2014
11.	Data Mining	IT Department,, NEC, Kovilpatti	03.01.2014
12.	Research Challenges in Cognitive Science	CSE-PG, NEC, Kovilpatti	01.02.2013
13.	Semantic Information Retrieval	CSE, NEC, Kovilpatti	07.04.2012
14.	Research Directions for UG & PG students	PSRR Engineering College, Sivakasi"	26.09.2013
15.	Computing Technologies	Lakshmi Ammal Polytechnic College, Kovilpatti	06.09.2012.
16.	Web designing	St. Mother Teresa Engineering college, Vagaikulam, Thoothukudi	07.09.2012

17.	Green Computing	PSR Engineering College, Sivakasi	01.09.2012
18.	Recent Trends and developments in Web Technology	Bharat Niketan Engineering College, Theni	19.03.2010
19.	XML and Web Services	Jeyamatha Engineering College, Aralvaimozhi, Kanyakumari District	07.04.2010

## REVIEWER

Reviewer for the following journals

- 1. Soft Computing, Springer
- 2. Bio cybernetics and Biomedical Engineering Journal(Elsevier)
- 3. Informatics in Medicine Unlocked Journal (Elsevier)
- 4. The Imaging Science Journal, Taylor & Francis
- 5. Int. J. of Business Intelligence and Data Mining(Inderscience)
- 6. International Conference,IConRAEECCE'19, Mepco Schlenk Engineering College, Sivakasi

# **INTERNATIONAL JOURNAL PUBLICATIONS**

Sl.No	Title of the paper	Name of the Journal	Page No. and Volume	Year	Impact Factor/ Indexing
1.	A blockchain based secure and privacy aware medical data sharing using smart contract and encryption scheme	Peer-to-Peer Networking and Applications	https://doi.org/10. 1007/s12083- 023-01449-1	2023	IF :3.484
2.	Secured Health Data Transmission Using Lagrange Interpolation and Artificial Neural Network	Computer Systems Science and Engineering	45(3), pp. 2673– 2692 https://doi.org/10. 32604/csse.2023. 027724	2023	IF :4.397
3.	A novel custom optimized convolutional neural network for a satellite image by using forest fire detection	Earth Science Informatics	DOI:https://doi.or g/10.1007/s12145 -022-00801-y	2022	IF: 2.878
4.	An MRI based approach for measuring the size of brain tumors	AIP Conference Proceedings	Vol.No. 2444, pp.0078330 DOI : https://doi.org/10. 1063/5.0078330	2022	Scopus Indexed
5.	IOT security system to avoid botnet threats for	AIP Conference Proceedings	Vol.No. 2444, pp. 0078354 DOI :	2022	Scopus Indexed

	mobile application		https://doi.org/10. 1063/5.0078354		
6.	Kafka based LSTM model for streaming data prediction	AIP Conference Proceedings	Vol.No. 2444, pp. 0078348 DOI : https://doi.org/10. 1063/5.0078348	2022	Scopus Indexed
7.	Predicting the Abnormality of Brain and Compute the Cognitive Power of Human Using Deep Learning Techniques using Functional Magnetic Resonance Images Soft Computing	Soft Computing – Springer. ISSN : 1433-7479	Volume 25, issue 23, December 2021, PP. 14461 - 14478 https://doi.org/10. 1007/s00500- 021-06292-1	2021	IF : 3.5 SCI Journal
8.	Deep learning methods for predicting brain abnormalities and compute human cognitive power using fMRI	Journal of Intelligent & Fuzzy Systems, ISSN 1064-1246	Vol. 41, no. 1, pp. 431-449, <b>DOI:</b> 10.3233/JI FS-202069	2021	IF : 1.851 SCI Journal
9.	Enhanced BB84 quantum cryptography protocol for secure communication in wireless body sensor networks for medical applications	Personal and Ubiquitous Computing, Springer ISSN : 1617-4917	DOI: https://doi.org/10. 1007/s00779- 021-01546-z	2021	IF :3.01 SCI Journal
10.	Forest fire detection on LANDSAT images using support vector machine	Concurrency and Computation Practice and Experience, Wiley Publications ISSN : 1532-0634	Volume 33,Issue 16,2021 DOI: https://doi.org/10. 1002/cpe.6280	2021	IF : 1.54 SCI Journal
11.	Hybrid cryptosystem in wireless body area networks using message authentication code and modified and enhanced lattice-based cryptography (MAC-MELBC) in healthcare applications	Concurrency and Computation Practice and Experience, Wiley Publications ISSN : 1532-0634	Vol.33,Issue.9 Pages.e6132 <u>DOI :</u> <u>https://doi.org/10.</u> <u>1002/cpe.6132</u>	2021	IF : 1.54 SCI Journal
12.	**	Lecture Notes in Electrical Engineering, Springer	Volume 700, Pages 2167-2174	2021	Scopus Indexed
13.	Smart Saline Bottle	European Journal of Molecular & Clinical Medicine	ISSN 2515-8260	2020	Scopus Indexed

14.	Machine learning and IoT-based cardiac arrhythmia diagnosis using statistical and dynamic features of ECG	Springer, Journal of Supercomputing, ISSN:0920-8542	Volume 76, pp.6533–6544 DOI : https://doi.org/10. 1007/s11227- 019-02873-y	2020	SCI Journal, IF: 2.5
15.	Remote Sensing For Forest Fire Detection Using Landsat Images	Journal of Web Engineering	Vol. 17, No.6, pp. 3138-3150, 2018, ISSN 1544-5976	2018	SCI Journal, IF :0.311
16.	Cardiac Arrhythmia Diagnosis System from Electrocardiogram Signal using Machine Learning Approach	IEEE Xplore	DOI: 10.1109/I2C2SW 45816.2018.8997 151	2018	Scopus Indexed
17.		International Journal of Biomedical Engineering and Technology	Vol.33 No.3, pp.274 - 289	2020	Scopus Indexed
18.	Fake Soft drinks detector using IOT	International Journal of Recent Technology and Engineering	Vol.8, Issue 6	2020	
19.	Automated Weed Removal System Using Convolutional Neural Network.	International Journal of Scientific & Technology Research	Volume 9 - Issue 3	2020	
20.	Secure and efficient data transmission in E-health care systems	International Journal of Scientific and Technology Research	9(3), pp. 6390– 6392	2020	
21.	Chera, chola, pandiya: Using historical mining to identify the tamil kingdoms data sets within larger social, poltical, and economic practices of early South India	International Journal of Scientific and Technology Research	9(1), pp. 3321– 3325	2020	
22.	Assured and coherent sharing of healthcare data in cloud using cryptography	International Journal of Recent Technology and Engineering	8(2 Special Issue 6), pp. 593–596	2019	
23.	A Neural Network based Cardiac Arrhythmia Diagnosis system from Dynamic Features of Electrocardiogram Signal	Indian Journal of Science and Technology	Volume 11, Issue 43	2018	
24.		Biosciences Biotechnology Research Asia	Vol. 15(1), p. 79-86	2018	UGC approved Journal
25.	Extraction of R-Peak from Photoplethysmographic signal for diagnosis of cardiac diseases	International Journal of Pure and Applied Mathematics	Volume 118 No. 18 2018, 2979- 2984	2018	Scopus Indexed
26.	Analyzing Social Media Data for Understanding Students Learning	International Journal of Pure and Applied Mathematics	Volume 118 No. 7, pp.513-521. ISSN: 1314-3395	2018	Scopus Indexed

	Experiences and Predicting their Psychological Pressure				
27.	Big data analysis for heart disease detection system using map reduce technique	IEEE Xplore	pp.1- DOI: 10.1109/IC CTIDE.2016.772 5360	2016	Scopus Indexed
28.	Diseases using Heart Sounds and ECG Signals	Russian Journal of Cardiology ISSN:1560- 4071	Vol.1(105), Engl.pp.35-41	2014	IF :0.5, SCI Journal Annexure-I (2015) No.7427 Scopus Indexed
29.	A Remote Healthcare Monitoring System for Faster Identification of Cardiac Abnormalities from Compressed ECG Using Advanced Data Mining Approach	Springer, Lecture Notes in Electrical Engineering, ISSN:18761100	Vol.222, pp 227-236	2013	Scopus Indexed Annexure-II (2013) No. 12563
30.	Dynamic web page segmentation based on detecting reappearance and layout of tag patterns for small screen devices	IEEE Xplore	Digital Object Identifier: 10.1109/ICRTIT. 2012.6206790,pp .508-513	2012	Scopus Indexed
31.	Analysis of Generic E- Learning Framework	World Review of Science, Technology and Sust. Development (WRSTSD), Inderscience Publishers, Switzerland (Impact factor-0.22) ISSN:17412242	Vol. 5, Nos. 3/4, PP.288-300	2008	Annexure-II (2014) No.19178 Scopus Indexed
32.	Reclamation of 2d Images from 3d Medical Resonance Images Using SWT	International Journal Of Multidisciplinary Research Centre (IJMRC) ISSN: 2454-3659(P) 2454-3861(E)	Volume I, Issue 5 October, pp.1-8	2015	-
33.	Analysis of EEG Signal for the Detection of Brain Abnormalities	International Journal of Computer Applications® (IJCA) (0975 – 8887)	-	2014	-
34.	Classification of Cardiac Vascular Disease from ECG Signals for Enhancing Modern Health Care Scenario	Health Informatics – An International Journal	Vol.02, No.04, pp.63 - 72.	2013	-
35.	Health Care Monitoring for the CVD Detection using Soft Computing Techniques	International Journal in Foundations of Computer Science & Technology (IJFCST),	Vol.3,No.4,pp. 21 - 30	2013	-
36.	Design and Development of Search Engine System Using Semantic	International Journal of Information Science and Intelligent System	Vol. 2, No.3.PP.43-52	2013	-

	Concepts				
37.	Network Based Framework for Information Retrieval Using Feature Association with Improved Keyword Weighting Factor	International Journal of Computer Trends and Technology-	volume4, Issue2- ISSN: 2231-2803 PP.106-111	2013	-
38.	Visual Search Optimization Using Concept Related Re- Ranking	International Journal on Computer Applications(IJCA)	Vol.ICON3C, No.1, pp.28-32, ISBN: 973-93- 80867-39-9	2012	-
39.	User Interactive Post Processing of Association Rules and Correlation Based Redundancy Removal	International Journal on Computer Applications(IJCA)	Vol.ICON3C, No.3,pp.31-35, ISBN: 973-93- 80867-33-2	2012	-
40.	Reappearance Layout Based Web Page Segmentation for small screen devices	International Journal on Computer Applications(IJCA)	Vol.No.49, No.20	2012	-
41.	A Texture Segmentation using Modified Hill- Climbing Approach	International Journal on Computer Applications(IJCA)	Number 1 - Article 6 pp.23-31	2011	-
42.	An Overview of Web Engineering and its Applications : A Survey and a Report	Association for the Advancement of Modeling & Simulation Techniques in Enterprises, AMSE, France	Vol. 12 nº 4, Advances D	2007	-

# Paper Presented in International Conferences: 23

S.No	Title of the Paper	Name of the Conference	Name of the Organization	Month & Year
1.	Adaptive Neuro-Fuzzy Inference Healthcare System for CardiacArrhythmia Detection Using Heart RateVariability Features	Springer Conference : Advances in Automation, Signal Processing, Instrumentation, and Control	Vellore Institute of Technology, Vellore	2021
2.	Cardiac Arrhythmia Diagnosis System from Electrocardiogram Signal using Machine Learning Approach	IEEE International Conference on Intelligent Computing and Communication for Smart World	Kongu Engineering College, Erode.	2020
3.	Historical Mining in Kingdoms of South India	TNSCST sponsored International Conference on Innovations in Engineering, Science and technology	Kalasalingam Institute of Technology, Krishnankoil, Srivilliputhur.	Feb 16-17, 2019
4.	Machine learning and IoT based Cardiac arrhythmia diagnosis	International Symposium on Artificial Intelligence and Computer Vision	College of Engineering Guindy, Anna University,	Sep 26-28, 2018.

	using statistical and dynamic features of ECG		Chennai	
5.	An IoT-Cloud Based ECG Telemonitoring System for Smart Healthcare	International Conference on Applied Science and Engineering and Technology (ICASET'18)	Sengunthar college of Engineering, Thiruchengodu.	Mar 16-17, 2018
6.	Analyzing Social Media Data for Understanding Students Learning Experiences and Predicting their Psychological Pressure	International Conference on Advances in Computer Science, Engineering and Technology (ICACSET'18),	Kalasalingam University, Krishnankoil, Tamilnadu, India	January 19-20, 2018
7.	Automatic weed eradication system using embedded system	International Conference on "Advanced Computing Communication Systems"	Sri Eshwar college of Engineering, Coimbatore.	April, 2017
8.	Big data analysis for heart disease detection system using map reduce technique	IEEE International Conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE)	National Engineering College,Kovilpatti	January, 2016
9.	Detection of Diabetic Heart Diseases using ECG and PPG Signals	IEEE Sponsored 7th National Conference on Computing, Communication and Information Systems.	Sri Krishna College of Engineering and Technology, Coimbatore.	February, 2015
10	Development of Framework for the Classification of Cardiac Arrhythmia Diseases by Analyzing Big Data	IEEE Sponsored 7th National Conference on Computing, Communication and Information Systems (NCCCIS- 2015)	Sri Krishna College of Engineering and Technology, Coimbatore.	February, 2015
11.	Real time diagnosis of respiration rate using single lead ECG	International Conference on Biosignal, Image and Instrumentation(ICBSII-2013)	SSN College of Engineering, Chennai	March, 2013
12.	Cardiac Arrhymia Diagnosis System using Data Mining Techniques in HRV Features	International Conference on Biosignal, Image and Instrumentation(ICBSII-2013)	SSN College of Engineering, Chennai	March, 2013
13.	User Interactive Post Processing of Association Rules and Correlation Based Redundancy Removal	International Conference, ICON3'12	Government College of Engineering, Tirunelveli	April, 2012
14.	Query Optimization Using SQL Approach for Data Mining Analysis	International Conference ICON3C'12	Government College of Engineering , Tirunelveli	April, 2012.
15.	Visual Search Optimization Using Concept Related Re- Ranking	International Conference on Recent Trends in Computational Methods, Communication and Controls.(ICON3C'12)	Government College of Engineering , Tirunelveli	April, 2012
16.	Design and Analysis of Information Retrieval System Using Semantics Concepts.	International Conference on Emerging Trends in Engineering Technologies.	Noorul Islam University, Kumaracoil.	March, 2010.
17.	Development of The Information Retrieval System from the XML	International Conference on Emerging Trends in Engineering Technologies.	Noorul Islam University, Kumaracoil.	March, 2010.

	Documents Using			
	Semantic Concepts.			
18.	A Modified Texture Segmentation Using Spectral, Shape and Intensity Features.	International Conference on Intelligent Science and Technology-SUNIST 2011.	Sun College of Engineering and Technology, Sun Nagar,Nagercoil.	March, 2011
19.	Network Based Framework for Information Retrieval Using Feature Association	International Conference on Information, Communication & Embedded Systems(ICICES- 2011)	S.A. Engineering College, Chennai-77	February, 2011.
20.	Simulation on JOB Scheduling Based on Cost Optimization in Grid Environment	International Conference on Information, Communication & Embedded Systems(ICICES- 2011)	S.A. Engineering College, Chennai-77.	February, 2011.
21.	Design and Analysis of Information Retrieval System using Semantic Concepts	International Conference on Emerging Trends in Engineering Technologies(ICETES)2010	Noorul Islam University,Kumaracoil	25th & 26th Mar'10
22.	Development of the Information Retrieval System from the XML Documents using Semantic Concepts	International Conference on Emerging Trends in Engineering Technologies(ICETES)2010.	Noorul Islam University,Kumaracoil	25th & 26th Mar'10
23.	Design and Development of Reasoner for the Semantic Search Engine	International Conference on Computing Technologies(ICONCT'09)	Mepco Schlenk Engineering College, Sivakasi	9-11, December, 2009

## NATIONAL CONFERENCE PUBLICATIONS: 20

SI. No	Title of the Paper	Name of the Conference	Organizer	Month &Year
1.	Attribute information extraction for small data set using classification technique	National Conference on Informational Network Management(NCINM'13)	Thiyagarajar College of Engineering, Madurai	04.04.2013
2	Ontology based search engine using HYBRID data alignment	2nd National Conference on Computing,Communication and Information Systems(NCCIS-2013)	Kongu engineering College	22.02.2013
3	Cardiac Arrhythmia diagnosis system using data mining techniques	National Conference on Computing, Communication & Information System(NCCIS-2013)	Sri Krishna College of Engineering	09.02.2013
4	User Interactive Post Processing of Assocation Rules and Redundancy Removal	National Conference on Computer Vision Sponsored by DRDO	Dr.Sivanthi Aditanar College of Engineering, Tiruchendur.	January,2012
5	Optimization of Visual Search Visual Relation Based e-ranking	National Conference on Computer Vision Sponsored by DRDO	Dr.Sivanthi Aditanar College of Engineering, Tiruchendur.	2012
6	Extraction of Data From Heterogeneous Web Pages Using Clustering.	National Conference on Computer Vision Sponsored by DRDO	Dr.Sivanthi Aditanar College of Engineering, Tiruchendur.	2012
7	Personalization of Community Web Directory Using Web Usage Data	National Conference on Computer Vision Sponsored by DRDO	Dr.Sivanthi Aditanar College of Engineering, Tiruchendur.	2012
8	Development of Web Based System for Disaster Management using Schema Integration Approach	National Conference on Information and Network Management(NCINM 2011)	Thiagarajar College of Engineering, Madurai.	March 2011
9	Dynamic Web Page Segmentation Based on Detecting Reappearance of Tag Pattern for Small Screen Devices	National Conference on Computer Vision Sponsored by DRDO	Dr.Sivanthi Aditanar College of Engineering, Tiruchendur.	January,2012
10	Image Segmentation for Computer Aided Histopathology Using Iterative Watershed	National Conference on Soft Computing	Dr.Sivanthi Aditanar College of Engineering, Tiruchendur.	March 2011
11	Design of the Semantic Search Engine Using XML Documents	National Conference on High Performance Computing	Government College of Engineering, Tirunelveli.	2010
12	Information Retrieval System for Semantic Search Engine	National Conference on Advanced Computing and Information Systems	Kongu Engineering College,Perundurai Erode.	2009
13	Design And Development of Reasoner for the Semantic Search Engine	National Conference	GCT,Coimbatore.	March 2009
14	Design And Development of Paper For Query Optimization	National Conference on Emerging Trends in Computing and Network Technology.	K.L.N College of Information Technology,Madurai.	March 2009

15	Development of Search	National Conference on	RVS College of	March
	Engine Using Semantic	Recent Trends in	Engineering &	2010
	Concepts	Information	Technology, Dindugul.	
	_	technology(NCRTIT)'10		
16	Development of the	National Conference on	Kalasalingam	March
	Information Retrieval	Recent Trends in	University,Krishnankovil	2010
	System from the XML	Communication		
	Documents Using	Systems(NCRCS)2010,		
	Semantics Concepts			
17	Analysis of Web Cache	National Conference on	Kalasalingam	February
	Replacement Policies	Information technology-	University,Krishnankovil	2008
		2008.		
18.	Development of Ontology	National Research	Kongu Engineering	February
	Based Web Applications	Conference on	College,Perundurai	2008
		Challenges&Innovations in Erode.		
		Information Technology		
		.CIIT-2008		
19.	Development of Search	National Conference on	Mepco Schlenk	March
	Engine using Semantics	Convergence of IT	Engineering	2007
	Web Concepts	Research.	College,Sivakasi.	
20.	Design And Analysis of	Third National Conference	PSNA College of	March 2007
	Standards Driven Generic	on ACENET'07.	Engineering and	
	Framework Model For E-		Technology, Dindigul	
	Learning Environments		624 622,India.	
	Using Rational Rose			

# **TECHNICAL EVENTS ORGANIZED**

Sl.No	Event Title	Sponsoring Agency	Amount	Duration
1.	AICTE sponsored National level online Conference on "Data Science and Intelligent and Information Technology" during	AICTE, New Delhi	-	14.05.2021 & 15.05.2021.
2.	Effective Learning through Online Tools	Internal Quality Assurance Cell	-	18.02.2021 - 20.02.2021
3.	R Programming Language for Teachers	Ministry of Human Resource Development, New Delhi	Remote Centre of IIT Bombay	09.11.2019
4.	WebEx Seminar - Time Complexity	University of Texas, Dallas, USA	-	21.02.19
5.	Recent advancements in computing technologies	University of Texas, Dallas, USA	-	28.11.17
6.	Predictive Maintenance and Remote Monitoring of wind turbines using IoT and Big Data	University of Texas, Dallas, USA	-	05.10.17
7.	Agile Methodology	University of Texas, Dallas, USA	-	14.09.17
8.	Time Complexity	University of Texas, Dallas, USA	-	August,2016

9.	Pre-Engineering Programme	University of Texas, Dallas, USA	-	01-08-16 to 04-08-16.
10.	IEEE International Conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE'16)	IEEE,TCS, BRNS, ISRO	Rs.2,05,000	7-9, January 2016
11.	National Conference on Advanced Image Processing and Networking "NACIPAN'15"	-	-	07.03.2015.
12.	11th National Conference on Advanced Image Processing and Networking "NACIPAN'14"	-		06.03.14 to 07.03.14.
13.	CSIR sponsored Two days 9th National Conference on Image Processing and Networking "NACIPAN'13"	CSIR	25,000	01.03.2013 & 02.03.2013
14.	Two days Seminar on Research Motivation-A Perspective			30.11.2012 & 01.12.2012
15.	8th National Conference on Image processing & Networking "NACIPAN'12"			02.03.2012 & 03.03.2012
16.	7th National Conference on Image processing & Networking "NACIPAN'11"			04.03.2011 & 05.03.2011.
17.	Department of Science and Technology sponsored Two days National seminar on Research Issues and Challenges in Cognitive Science	DST	Rs.30,000	01.02.1013 and 02.02.2013
18.	IBM Training Programme on "DB2"	IBM	-	19.11.2009 to 21.11.2009.
19.	IBM Training Programme on "DB2"	IBM		30.03.2010 to 01.04.2010.
20.	Computer Training Programme for the Judicial Officers			25.06.2007 to 20.07.2007.
21.	Faculty Development Programme on IBM Community EditionTechnologies (J2EE, Eclipse, WAS CE, DB2)	IBM		25.10.2007 to 26.10.2007
22.		Anna University, Chennai	Rs.25,000	07-11-05 to 19-11-05

## SHORT TERM COURSES / SEMINARS / WORKSHOPS ATTENDED

S.No	Title	Period	Venue
1.	Online Short-Term Course on "Role of Deep Learning in Interdisciplinary Research"	06.03.2023 to 10.03.2023	National Institute of Technology Warangal
2.	FDP on Artificial intelligence and machine learning"	22.11.2021 to 26.11.2021	National Institute of Technology Warangal

3.	IAE Research webinar on Research Projects & Fundraising	31.08.2021	Institute for Academic Excellence, Hyderabad.
4.	AICTE – Online orientation Training for Mentors	July 26 - 30, 2021	NITTTR , Chennai, Online
5.	One Week FDP on Data Science and Data Analytics with Hands on Experience	01.02.2021 to 05.02.2021	AICTE Training and Learning (ATAL) Dr.Ambedkar Institute of Technology. Bangalore
6.	Attended one week Industrial training	21.04.2020 to 26.04.2020.	M/s Embris Solutions Pvt.Ltd., Pune
7.	Universal Human Value on the them "Inculcating Universal Human Value in Technical Education"	21-25 September, 2020	AICTE online workshop
8.	Big Data Analytics with HADOOP	10.10.2019 & 11.10.2019	Pondicherry Engineering College, Pondicherry.
9.	Three days workshop on AI & Deep Learning, Bennett University, Noida	28.12.2018 to 30.12.2018	NEC
10.	Attended work shop on National Information Centre for Climate and Environment Studies	26.02.2018	National Institute of Technology, Calicut
11.	Attended one week Industrial training	13.02.2018 to 17.02.2018	Assistanz Networks Pvt. Ltd., Coimbatore
12.	Attended and certified NPTEL online course on "Computer Organization and Architecture"	09-07-2017 to 26-10-2017(12 Weeks)	NPTEL & IIT KHARAGPUR
13.	Attended and certified NPTEL course on "Design and Analysis of Algorithms"	23.01 2017 to 17.03.2017 (08 Weeks)	NPTEL & IIT Madras
14.	Attended and certified NPTEL online course on "Introduction to Mobile Application Technology"	05.09.2016 to 30 Sep 2016 (4 weeks)	NPTEL & IIT Madras
15.	Professional Skills Development Programme"	05.08.15 to 07.08.15	Engineering Staff College of India(ESCI), Hyderabad
16.	Formulation of R & D initiatives for Women Scientists and Technologists	29.05.2014 to 01.06.2014	Engineering Staff College of India(ESCI), Hyderabad
17.	Attended NBA Resource Person Training Workshop Phase I & II	07.06.14 & 14.06.14 –	National Engineering College
18.	Advanced Image Processing towards Research	16.03.2013	National Engineering College
19.	Principles & Practices of Knowledge Discovery Database	14.09.12 & 15.09.12	Anna University, Chennai

20.	J2EE and Best Practices in Application Development	25.02.10 & 26.02.10	Anna University of Technology, Tirunelveli.
21.	Machine Learning Techniques	11.09.09 & 12.09.09	PSG College of Technology, Coimbatore
22.	XML and Web Services	23.05.08 & 24.05.08	National Engineering College
23.	Research Motivation	10.11.2006 & 11.11.2006	National Engineering College
24.	Effective Teaching and Research Methodology for College Teachers	23.09.06	Sri Ramakrishna Engineering College, Coimbatore
25.	Ph.D Aspirants Meet on Academic Research : An Industrial perspective	14.09.06 to 16.09.06	National Engineering College
26.	AICTE – ISTE Sponsored Short Term Training Programme on Web Technology	25.10.04 to 06.11.04	Mepco Schlenk Engineering College, Sivakasi
27	2 days workshop on "DOT NET Technology	08.11.04 to 09.11.04	Kamaraj College of Engineering, Virudhunagar
28.	3 days workshop in "Digital Signal Processing"	17.04.03 to 19.04.03	National Engineering College

## Industry Know-How Attended

- One week Industrial Training has been attended at M/s Embris Solutions Pvt.Ltd., Pune Artificial Intelligence based automation company from 21.04.2020 to 26.04.2020.
- One week Industrial Training have been attended at M/s Assistanz Technologies Pvt.Ltd., Software development and cloud based company from 13.02.2018 to 17.02.2018.

## **Industrial Interaction**

- As a Technobation coordinator, MoU has been signed with M/s Brimma Technologies on 13.12.2022 to provide Internship and campus placement for our students
- NEC-Brimma Technobation Center has been established on 08.04.2022.

## **Specific Achievements:**

• University I Rank in BE and College III Rank in ME degree

- Innovative Student Project Award, Indian National Academy of Engineering(INAE), 2013 for the Project is selected "Real Time Diagnosis System for Cardiac Arrhythmia Disease Based on HRV Features Using Data Mining Techniques"
- Best Paper award in International conference on Emerging Trends in Engineering Technologies (ICETES'10), NI University, Tuckalay on 25.03.2010.
- Author for "Web Technology: Principles and Practices", book published by Sree Magnus Publications, Chennai.

# **Additional Responsibilities**

- 1. Extension and Outreach Cell Coordinator from 2022-2023.
- 2. Technobation Centre Coordinator from 2021-2022
- 3. Alumni Network Coordinator in 2021-2022
- 4. IQAC (Internal Quality Assurance Cell) Coordinator from 2019-20 to 2020-2021.
- 5. Co-Coordinator in IQAC from 2016-17 to 2018-19
- 6. Professor In-charge, Revamping of College Website, 2018-2019
- 7. Anna University Chief Superintendent during 2016-17.
- 8. Associate Warden in Ladies Hostel from 2010 to 2015.
- 9. Staff Coordinator for Rotract Club from 2007 to 2010.
- 10. Staff Coordinator for Institution of Engineers Students' Chapter from 2004 to 2007.

## **Professional Membership**

- 1. Life Member in Indian Society for Technical Education(ISTE)
- 2. MIE in Institution of Engineers (India).Kolkatta

## Dr.V.KALAIVANI