

FACULTY PROFILE

1. Name : S.KALAISELVI
2. Present Post / Dept. : ASSOCIATE PROFESSOR
Department of CSE
National Engineering College
Kovilpatti
3. Date of joining in the college : 01.06.2009

4. Educational Qualification

<i>Educational Qualification</i>	<i>Branch</i>	<i>Name of the Institution/University</i>	<i>Yr. of Passing</i>	<i>% of Marks</i>	<i>Class/ Division</i>
B.Sc	Chemistry	Govindammal Aditanar College for Women	2000	93	First
M.C.A	M.C.A	MK University	2004	78	First
M.E.	CSE	National Engineering College / Anna University	2009	83	First
Ph.D	ICE	Anna University	2021	-	

5. No. of years of Experience in: i. NEC : 12 Y 9 M ii. Other Colleges : 1 Y 10 M

Designation	Institution/ Organization	Period
Associate Professor	National Engineering College, Kovilpatti	06.04.2022 to tilldate
Assistant Professor(SG)		01.08.2016 to 05.04.2022
Assistant Professor		01.11.2011 to 31.07.2016
Lecturer		01.06.2009 to 31.10.2011
Lecturer	Arasan Ganesan Polytechnic College, Sivakasi	June 2006-May 2007
Lecturer	Aditanar Arts and Science College, Tiruchendur	Sep 2004-May 2005

6. No. of Papers Presented in Conference/Seminar

- a) International Conference: 13 b) National Conference: 6

International Conference Publications

S.No	Title of the Paper	Name of the Conference	Organizer	Month & Year
1	Convolutional Neural Network for Remote Sensing Classification	ICRACIA 2021	M.Kumarasamy College of Engineering	31.03.2021
2	Blood Pressure Monitoring System During Pregnancy	ICCET'19	Prince Sri Venkatewara Padmavathy Engineering College	09.03.2019

3	Kernel Based FCM for Change Detection in Multitemporal Remote Sensing Images	ICCCI' 16	Alagappa Chettiar College of Engineering, Karaikudi	06.10.2016
4	Classification of Landuse Images using Deep Learning Networks	ICIIECS' 16	Karpagam College of Engineering, Coimbatore	17 th & 18 th March 2016
5	Land use Land cover Classification of remotely sensed data using Object Based Segmentation.	ICIIECS'15	Karpagam College of Engineering, Coimbatore	15.03.2015
6	Change Detection from Remotely Sensed Images using Fuzzy Distance Measure	ICCTRD'15	SCAD College of Engineering, Tirunelveli	12.02.2015
7	Urban post conflict change classification performance using optimal wavelet features in Self organizing feature map	ICRTIT'14	Madras Institute of Technology, Chennai	April 2014
8	An Efficient Method for Crowd Event Recognition based on Motion Patterns	ICRTIT'14	Madras Institute of Technology, Chennai	April 2014
9	Unsupervised Monitoring of Urban Land use and Land cover change detection in Multi temporal images	ICECS'14	Karpagam College of Engineering, Coimbatore	13 & 14 February 2014
10	A Registration Technique for Medical Images using Fuzzy SIFT Matching	ICIIECS'14	Karpagam College of Engineering, Coimbatore	13 & 14 March 2014
11	Unsupervised Change Detection of Tumor in Medical Images	BSSI'12	IIT Chennai	29.11.2012
12	Unsupervised Change detection using UDWT and neural networks	ICACC'12	Teja Sakthi Institue of Technology for Women, Coimbatore	9 th & 10 th January 2012
13	Multi-view based Human Activity Recognition using discrete hidden markov models	ICONCT '09	Mepco Engineering College, Sivakasi	9 th December 2009

National Conference Publications

S.No	Title of the Paper	Name of the Conference	Organizer	Month & Year
1	Land use Land cover Classification of remotely sensed data using Multi-Scale Segmentation.	NCACM'15	Anna university, Coimbatore Region	March 2,3 2015
2	An Efficient Crowd Behavior Recognition using Motion Patterns for Intelligent Video Surveillance	ETCCT '14	Coimbatore Institute of Technology, Coimbatore	03.03.2014 & 04.03.2014

3	Fuzzy rule based classification of multispectral images using SOM	VISION'13	Government College of Engineering, Tirunelveli	March 2013
4	Clustering Based Registration of Remotely Sensed Data	VISION'13	Government College of Engineering, Tirunelveli	March 2013
5	Unsupervised Change Detection in Multitemporal satellite images using Undecimated Discrete Wavelet Transform	NLC IPC'11	PSG College of Technology and PSG Polytechnic, Coimbatore	17 th & 18 th November 2011
6	Spatial Transform Invariant Human Activity Recognition	MEPCOIT'09	Mepco Engineering College, Sivakasi	13 th March 2009

7. No. of Publications in Journals

Publications in SCOPUS Journals

S.No	Title of the Paper	Name of the Journal	Vol.No & Page No.	Month & Year
1	Unsupervised Monitoring of Urban Land Use and Land Cover Change Detection in Multitemporal Images	IEEE – Explore 10.1109/ECS.2014.6892722	08 September 2014	
2	An Efficient Method for Crowd Event Recognition based on Motion patterns	IEEE - Explore 10.1109/ICRTIT.2014.6996124	29 December 2014	
3	Change Detection from Remotely Sensed Images using Fuzzy Distance Measure	International Journal of Advanced Research in Science and Engineering (ISSN – 2319-8354)	Vol.4, No.2	March 2015
4	Air Quality Prediction through Regression Model	IJSTR	Volume 9, Issue 3	March, 2020
5	Applying Government Schemes in Rural Sectors Prediction System for Evaluation of Data Science Algorithm	International Journal of Recent Technology and Engineering (IJRTE),	Volume-9 Issue-5	January 2021
6	Fraud Detection Method For Low-Frequency Transaction	GisScience.Net, UGC Care I Listed Journal	Vol.8, Issue 3, 2021	MARCH 2021
7	Prognosticating clinical incidents via recurrent neural networks by using clinical doctor AI	European Journal of Molecular & Clinical Medicine	Volume 08, Issue 03,	2021
8	Air Quality Prediction using Remote Sensing	AIP conference Proceedings ; https://doi.org/10.1063/5.0078338	2444, 040005	March 2022

9	Road Segmentation From Remote Sensing Images Using Fuzzy Based Convolutional Neural Network	AIP conference Proceedings https://doi.org/10.1063/5.0078336	2444, 040007	March 2022
10	Intelligent Sales Prediction Using ARIMA Techniques	AIP conference Proceedings https://doi.org/10.1063/5.0078379	2444, 040006	March 2022
11	Student Portal Application	IEEE – Explore	Accepted	

Publications in SCI Journals

S.No	Title of the Paper	Name of the Journal	Vol.No & Page No.	Month & Year
1	α -cut induced Fuzzy Deep Neural Network for Change Detection of SAR images	Applied Soft Computing, Elsevier https://doi.org/10.1016/j.asoc.2020.106510	Vol.95,	October 2020,
2	Sensor-based human activity recognition using fuzzified deep CNN architecture with λ_{max} method	Sensor Review https://doi.org/10.1108/SR-06-2021-0195	Vol. 42 No. 2, pp. 250-262	Jan 2022

8. FDP / Seminars Attended :

S.No	Title	Period	Venue
1.	ATAL FDP on Artificial Intelligence and Machine Learning for Healthcare	13/12/2021 to 17/12/2021	College of Engineering Pune
2.	Machine learning with Azure ML	Nov 2021	Coursera course
3.	Develop a company website with Wix	Sep 2021	Coursera course
4.	TTT on Program on Creating Microsite on Infosys Springboard	31.08.2021 to 02.09.2021	Infosys - Online
5.	Fundamentals of Deep Learning	17.04.2021	NVIDIA -DLI - Online
6.	Overview of Geoprocessing using Python	18.01.2021 to 29.01.2021	Indian Institute of Remote Sensing - Online
7.	Online FDP on Internet of Things	16.07.2020 to 18.07.2020	NITK- STEP - Online
8.	Step into RPA	01.06.2020	GUVI's Skill-a-thon
9.	C++ for C programmers	May 2020	Coursera Course
10.	Introduction to Data science Python	May 2020	Coursera Course
11.	Python Django Web Development :To Do App	Apr 2020	Udemy Course
12.	Business Analytics and its Applications using R	28.09.2019 to 02.10.2019	NIT Trichy

13.	NPTEL – Python for Data Science	Aug-Sep 2019	National Engineering College, Kovilpatti
14.	FDP on Introduction to Python Programming	01.08.2019 to 03.08.2019	National Engineering College, Kovilpatti
15.	Scilab Workshop	04.05.2019	Teaching Learning Centre, IIT Bombay- National Engineering College, Kovilpatti
16.	Industry Know How Program on Machine Learning	18.03.2019 to 22.03.2019	Vyakya Technologies, Chennai
17.	Workshop on Deep Learning - AI	11.08.2018 to 13.08.2018	KLE Technological University, Hubli
18.	NPTEL – Deep Learning	July – October 2018	National Engineering College, Kovilpatti
19.	GIAN course on Advance level course on Remote Sensing Image Processing and Analysis	16.11.2017 - 20.11.2017	NITK Surathkal, Mangalore
20.	Deep Learning	29.07.2017	Mepco Schlenk Engineering College, Sivakasi
21.	Technology enabled Teaching learning process	27.05.2017 - 29.05.2017	National Engineering College, Kovilpatti
22.	NPTEL - Programming, Data structures and Algorithms using Python	Jan - Mar 2017	National Engineering College, Kovilpatti
23.	Infosys - UI Technologies	29.03.2017 - 31.03.2017	K.S.R.College of Engineering, Tiruchengode
24.	Tech Mahindra- FDP	14.02.2017 - 16.02.2017	Tech Mahindra Ltd. Chennai
25.	Infosys - Foundation Program 5.0	26.12.2016 - 30.12.2016	Infosys Ltd. Chennai
26.	Recent Trends in Optimization Techniques and its Applications	05.12.2016 - 06.12.2016	Mepco Schlenk Engineering College, Sivakasi
27.	Bhuvan Overview Training	22.03.2016 - 23.03.2016	National Remote Sensing Centre, Hyderabad
28.	Train the Trainers on Python Programming	18.05.2015 - 20.05.2015	Saveetha Engineering College, Chennai
29.	Research Methodology	15.12.2014	Anna University, Chennai
30.	Data base Management System	04.12.2013 - 10.12.2013	Anna University, Tirunelveli Region
31.	Research: A Perspective	30.11.2012 - 01.12.2012	National Engineering College, Kovilpatti
32.	Recent Trends and Research Issues in Semantic Based Image Analysis	10.10.2012 – 11.10.2012	Mepco Schlenk Enginneering College, Sivaksi
33.	Soft computing techniques using Matlab	16.03.2012	Dr.G.U.Pope Engineering College, Sawyerpuram
34.	Prospective issues and methodologies in Human Machine Interaction	17.05.2010- 21.05.2010	National Engineering College, Kovilpatti
35.	Soft Computing and Mathematical Modeling	15.02.2010- 20.02.2010	Gandhigram Rural University, Dindigul
36.	Research Issues and Challenge on Image Processing towards Remote Sensing	04.12.2009 - 05.12.2009	National Engineering College, Kovilpatti

37.	DB2 Technologies	19.11.2009 - 21.11.2009	National Engineering College, Kovilpatti
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Workshop/ Seminar Organized

S. No	Title	Grant Details	Venue	Date
1	AICTE sponsored ATAL FDP on Predictive Intelligence Models and its Applications	AICTE – Rs.93,000	National Engineering College - Online	12.07.2021 to 16.07.2021
2	NVIDIA - DLI Workshop in Fundamentals of Deep Learning	Intra College Programme	National Engineering College	17.04.2021
3	Infosys Seminar- Overview of Python	Intra College Programme	National Engineering College	12.09.2019
4	Infosys Seminar – Industry Perspectives	Intra College Programme	National Engineering College	10.09.2019
5	Insights into Machine Learning and Deep Learning Approaches	Self - Supported	National Engineering College	19.07.2019 to 20.07.2019
6	AICTE Approved workshop on “AI & Deep Learning”, technically sponsored by Bennett University, Noida	Self - Supported	National Engineering College	28.12.2018 to 30.12.2018
7	Infosys - Seminar on Artificial Intelligence	Intra College Programme	National Engineering College	12.12.2017
8	Infosys - Seminar on Software Testing	Intra College Programme	National Engineering College	27.09.2017
9	Infosys- Train the Trainers Workshop for FA2 - DBMS	Intra College Programme	National Engineering College	02.11.2015 to 04.11.2015
10	Matlab Applications for Engineering	Self – Supported	National Engineering College	22.08.2014 to 23.08.2014
11	Hands on training in Matlab	Self - Supported	National Engineering College	23.08.2013 to 24.08.2013 and 30.08.2013 to 31.08.2013
12	Advancements In Image Processing Towards Research	Self - Supported	National Engineering College	16-03-2013
13	Exploring Matlab	Self - Supported	National Engineering College	20.10.2012
14	Insight into Matlab	Self - Supported	National Engineering College	16.09.2012

Guest Lecture Delivered

- Delivered a session on “Machine Learning” during the two days workshop on “Computational Tools for Research” on 07.10.2021 at Kristu Jayanthi College, Bangalore
- Resource Person for IEEE Madras Section Sponsored two-day online workshop on “Data Science using Python” on 29-01-2021 and 30-01-2021 held at CSE Dept, National Engineering College

- Resource Person for IEEE Madras Section Sponsored two-day online workshop on “Machine Learning using Python” on 31-01-2020 and 01-02-2020 held at CSE Dept, National Engineering College
- "Insights into Machine Learning and Deep Learning Approaches", on 19.07.2019 at National Engineering College, Kovilpatti
- “Hands on training in the applications of Image processing using Fuzzy Logic” on 12.02.2019 at National Engineering College, Kovilpatti
- “Hands on workshop on Digital Image Processing using MATLAB” on 15.09.2015 at National Engineering College, Kovilpatti
- "Matlab Applications for Engineering" on 22.08.2014 to 23.08.2014 at National Engineering College, Kovilpatti
- "Hands on training in Matlab" on 23.08.2013 to 24.08.2013 and 30.08.2013 to 31.08.2013 at National Engineering College, Kovilpatti
- "Exploring Matlab" on 20.10.2012 at National Engineering College, Kovilpatti
- "Insight into Matlab" on 16.09.2012 at National Engineering College, Kovilpatti
- “Machine Learning using python” on 31.01.2020 & 01.02.2020 at National Engineering College, Kovilpatti.

. No. of Funded Projects Completed / Ongoing as Principal Investigator or Co-Investigator:

Sl.No.	Project Title	PI / Co-PI	Agency	Amount	Status / Duration
1	Land cover classification and forest change analysis using multi-temporal data	CO-PI	Minstry of Environment and Forest	Applied during October 2013 – Not Sanctioned	
2	Design and Development of Green space destruction monitoring systems in urban areas using multi temporal images	CO-PI	ISRO	Applied during Feb 2014 – Not Sanctioned	
3	Development of deep learning model based micro watershed LULC monitoring using remote sensing and GIS for Tamirabarani river basin in Tirunelveli District	CO-PI	ISRO	Applied during Mar 2021 – Not Sanctioned	
4	Modeling and Prediction of Urban Spatial Growth using	CO-PI	TNSCST	Submitted during March 2022	

	an Integrated Model of Deep Neural Network and Cellular Automata for Thoothukudi and Tirunelveli Cities			
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Details of Consultancy Work:

Sl.No.	Consultancy Work details	Industry	Status	Amount
1	Tea Leaf Disease detection	Kannan Devan Tea estae	Initiated	
2	Person Reidentification through CCTV Surveillance	Datafoundry.AI	Initiated	

Details about Research Facilities Created / Initiated:

Through Seed Money Proposal, “Centre of Image Processing Lab” establishment is initiated.

Membership in Professional Bodies:

Specific / Remarkable Achievement in academic / administration, if any :

- i. Software development
 - a. Recruitment Portal (NEC, LAPC, KR Arts)
 - b. Staff Performance Appraisal Portal (NEC, LAPC, KR Arts)
 - c. Grievance Portal (NEC, LAPC)
 - d. CBCS
 - e. R & D Portal
 - f. UPS management
 - g. Service Rules
 - h. End Sem CO calculation
 - i. Student Feedback
 - j. EB- Bill assessment
- ii. ERP Coordinator
- iii. IOBPAY fee management for LAPC & KR Arts
- iv. Infosys SPoC - Received best SPoC award in 2017
- v. Worked as a mentor in IMS project with Bizpluss Pvt Ltd from April 2019 to Dec 2021.
- vi. NBA & NAAC works
- vii. Tutor