#### FACULTY PROFILE

## S. KALAISELVI,

Associate Professor,
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https://www.scopus.com/authid/detail.uri?authorId=58530765600 **Vidwan Profile:** https://vidwan.inflibnet.ac.in/profile/211426



#### Research Area

Remote Sensing, Image Processing, Data Analytics

## **Supervisor Recognition**

- Anna University Chennai (Ref. No: 4140004)
- Ph.D., Scholars: In Progress: 4

# **Professional Experience**

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

## **Membership in Professional Bodies**

IEEE, IEEE-CS

### **Publications (SCI and Scopus Indexed)**

- Anitha, V., Kalaiselvi, S., Gomathi, V. et al. A lightweight CNN for LULC classification: an alpha-cut fuzzy geometric normalization approach, Signal, Image and Video Processing, Springer 19, 753 (2025). <a href="https://doi.org/10.1007/s11760-025-04349-4">https://doi.org/10.1007/s11760-025-04349-4</a> (IF: 2)
- 2. "Downstream Lingering Attention Transformer Network (DsLATNet) for Land use Land cover Classification: A Bicolor Deep Learning Framework", V. Anitha, D. Manimegalai,

- S.Kalaiselvi, Applied Soft Computing, Elsevier, Volume 165, November 2024, 112074. DOI: <a href="https://doi.org/10.1016/j.asoc.2024.112074">https://doi.org/10.1016/j.asoc.2024.112074</a>. (IF: 7.2)
- 3. "Sensor-based human activity recognition using fuzzified deep CNN architecture with λmax method", Gomathi V, **Kalaiselvi S**, Thamarai Selvi D, Vol. 42 No. 2, pp. 250-262, Jan 2022. DOI: https://doi.org/10.1108/SR-06-2021-0195. (IF: IF: 1.583)
- "α-cut induced Fuzzy Deep Neural Network for change detection of SAR images", S. Kalaiselvi and V. Gomathi, Applied Soft Computing, Elsevier, Vol 95, Oct 2020. DOI: <a href="https://doi.org/10.1016/j.asoc.2020.106510">https://doi.org/10.1016/j.asoc.2020.106510</a>. (IF: 5.472)
- "Air Quality Prediction Through Regression Model", A.Aarthi, P.Gayathri, N.R.Gomathi,
   S.Kalaiselvi, Dr.V.Gomathi, International Journal of Scientific & Technology Research, Vol 9,
   Issue 03, ISSN 2277-8616, March 2020. (Scopus)

## **Scopus Indexed Conference/ Book chapter Publications**

- Mohan, K.R., Narmada Devi, R., Jana, S., Murugesan, R., Kumaravel, S.K., Kalaiselvi, S. (2025). Neutrosophic Numbers in Identifying Best Teacher Awardee Using SWOT Analysis. In: Jana, S., Basu Mallik, B., Sarkar, A., Jana, C. (eds) Applications of Fuzzy Logic in Decision Making and Management Science. Information Systems Engineering and Management, vol 29. Springer, Cham. <a href="https://doi.org/10.1007/978-3-031-77719-6">https://doi.org/10.1007/978-3-031-77719-6</a> 9
- Mohan, K.R., Narmada Devi, R., Murugesan, R., Kumaravel, S.K., Kalaiselvi, S. (2025). Neutrosophic Statistical Analysis in the Role of Grand Parents for Exploration of Proficient Amelioration of Grand Children. In: Smarandache, F., Khan, Z. (eds) Neutrosophic Paradigms: Advancements in Decision Making and Statistical Analysis. Studies in Fuzziness and Soft Computing, vol 435. Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-031-78505-4\_15
- Gayathri .M, D. Thamarai Selvi, S. Kalaiselvi and S. Santhi, "Colorectal Cancer Detection based on Integrated Graph Convolutional Networks and Shift Window Transformer," 2025 3rd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT), Bengaluru, India, 2025, pp. 2192-2198, doi: 10.1109/IDCIOT64235.2025.10915085.
- 4. Raghava Moorthy R; Liepass S; Muthu Sneka R; Manimaran V; **Kalaiselvi S**; Anitha V, "Improved Fuzzified LA Transformer Integrated CNN for Person Reidentification," 2025 International Conference on Computational, Communication and Information Technology (ICCCIT), Indore, India, 2025, pp. 44-48, doi: 10.1109/ICCCIT62592.2025.10927979.
- 5. B. G. Varshini, A. Manimegalai, S. D. Abirami and **S. Kalaiselvi**, "Eye-Gaze Controlled Virtual Keyboard Using Blink Detection for Accessible Hands-Free Communication," 2025

- International Conference on Computational, Communication and Information Technology (ICCCIT), Indore, India, 2025, pp. 49-56, doi: 10.1109/ICCCIT62592.2025.10927769.
- 6. Inisha Sallove R,Karishma S, Priya Dharshini K, Anitha V, Kalaiselvi S, Manimaran V, "Enhancing Land Use and Land Cover Classification in Satellite Imagery Using Vision Transformers: A Comparative Analysis with Convolutional Neural Networks," 2025 3rd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCloT), Bengaluru, India, 2025, pp. 1613-1618, doi: 10.1109/IDCIOT64235.2025.10915061
- Mohan, K.R., Devi, R.N., Murugesan, R., Kumaravel, S.K., Kalaiselvi, S. (2025). MCDM
  PROMETHEE Method in Identifying Best Teacher Awardee. In: Sahoo, L., Senapati, T., Pal,
  M., Yager, R.R. (eds) Decision Making Under Uncertainty Via Optimization, Modelling, and
  Analysis. Studies in Systems, Decision and Control, Vol 558. Springer, Singapore.
  <a href="https://doi.org/10.1007/978-981-96-0085-4\_26">https://doi.org/10.1007/978-981-96-0085-4\_26</a>
- 8. Renuka Sre V; Smega M; Ruthra Varshini S; Anitha V; **Kalaiselvi S**; Santhi S, "A Fuzzy-Siamese Framework With Triplet Loss For Early Tomato Leaf Disease Diagnosis," 2024 International Conference on Emerging Research in Computational Science (ICERCS), Coimbatore, India, 2024, pp. 1-4, doi: 10.1109/ICERCS63125.2024.10895024
- 9. "Enhancing Solar Energy Efficiency: A Deep Learning Approach for Dust Detection," , Vigna Harish R; Ramya A; Siva S; Santhi S; **Kalaiselvi S**; Anitha V, 2024 International Conference on Smart Electronics and Communication Systems (ISENSE), Kottayam, India, 2024, pp. 1-5, doi: 10.1109/ISENSE63713.2024.10872376
- 10. "A Sentimental Analysis of Legal Documents Using Mask Attention BERT Networks", D. Thamarai, S. Kalaiselvi, V. Anitha, S. Santhi, V. Gomathi, Revolutionizing Data Science and Analytics for Industry Transformation, edited by Paul Devasahayam Manuel, et al., IGI Global, 2025, pp. 243-264. https://doi.org/10.4018/979-8-3693-7868-7.ch010
- Yogalakshmi, P., Manimaran, V., Kalaiselvi, S., Srinivasagan, K.G. (2025). Person Reidentification Using Convolutional Fuzzy Neural Network Classifier. In: Stroe, DI., Nasimuddin, D., Laskar, S.H., Pandey, S.K. (eds) Emerging Electronics and Automation. E2A 2023. Lecture Notes in Electrical Engineering, vol 1237. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-97-6802-8-20">https://doi.org/10.1007/978-981-97-6802-8-20</a>
- Alex, S., Satish, K., Anitha, V., Kalaiselvi, S., Santhi, S. (2025). Demand Forecasting for Market Basket Analysis. In: Stroe, DI., Nasimuddin, D., Laskar, S.H., Pandey, S.K. (eds) Emerging Electronics and Automation. E2A 2023. Lecture Notes in Electrical Engineering, vol 1237. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-97-6802-8">https://doi.org/10.1007/978-981-97-6802-8</a> 21
- 13. An Extractive and Abstractive Approach of Text Summarization. Kalyana Sundaram, M., Bhuvanesh, R., Hari Narayanan, R., **Kalaiselvi, S.**, Thamarai Selvi, D., Gomathi, V. (Oct 2024), In: Suresh, S., Lal, S., Kiran, M.S. (eds) Intelligent Control, Robotics, and Industrial

- Automation. RCAAI 2023. Lecture Notes in Electrical Engineering, vol 1220. Springer, Singapore. https://doi.org/10.1007/978-981-97-4650-7\_31
- Multi-Convolutional Neural Network Based Crowd Counting Using VGG-19 Architecture., John Pradeep, J., Raja Arumugham, M., Santhi, S., Kalaiselvi, S. (Oct,2024).
   In: Suresh, S., Lal, S., Kiran, M.S. (eds) Intelligent Control, Robotics, and Industrial Automation. RCAAI 2023. Lecture Notes in Electrical Engineering, vol 1220. Springer, Singapore. https://doi.org/10.1007/978-981-97-4650-7\_27
- 15. "Emotion Recognition from Speech an LSTM approach with the Tess Dataset", K Sankara Pandiammal, S Karishma, K Harine Sakthe, V Manimaran, **S Kalaiselvi**, V Anitha, IEEE Xplore, July 2024. DOI: 10.1109/ICITIIT61487.2024.10580351.
- "Resnet-50 Integrated with Attention Mechanism for Remote Sensing Classification", M. Harini, S. Selvavarshini, P. Narmatha, V. Anitha, S. Kalaiselvi & V. Manimaran, Lecture Notes in Networks and Systems (LNNS), Springer, Vol. 955, pp 255–265, June 2024. DOI: <a href="https://doi.org/10.1007/978-981-97-1841-2">https://doi.org/10.1007/978-981-97-1841-2</a> 19.
- 17. "A Decentralized Fog Architecture for Video Preprocessing in Cloud-based Video Surveillance as a Service", Divya G, Swetha K, Siva Shruthika S, Guru Santhosh P, Santhi S and **Kalaiselvi S**, IEEE Xplore, pp. 904-910, May 2024. DOI: 10.1109/ICC-ROBINS60238.2024.10533958.
- 18. "Convolutional neural network for remote sensing classification", Hazeena Mariyam Fathima, Maha Lakshmi, Padma Pooja, Anitha, **Kalaiselvi**, AIP Conference Proceedings, Vol. 2831, Issue 1, Sep. 2023. DOI: <a href="https://doi.org/10.1063/5.0171255">https://doi.org/10.1063/5.0171255</a>.
- "Image Captioning for Colorectal Cancer Using Deep Learning Approaches", G. Pavithra,
   V. Gomathi, D. Thamarai Selvi, P. Selva Rathinam & S. Kalaiselvi, Algorithms for
   Intelligent Systems, Springer, pp 261–275, September 2023. DOI: <a href="https://doi.org/10.1007/978-981-99-3485-0\_20">https://doi.org/10.1007/978-981-99-3485-0\_20</a>.
- 20. "A Recommendation System for Crop Prediction Under Diverse Weather Conditions", P ShunmugaLakshmi, V Ram Kishore, Pillai Pratham Ramachandran, S Santhi, S Kalaiselvi, IEEE Xplore, Page(s): 1704 1709, May 2023. DOI: 10.1109/ICACCS57279.2023.10112944.
- 21. "A Novel Object Detection Framework using Convolutional Neural Networks (CNN) and RetinaNet", Archana V, **Kalaiselvi S**, Thamaraiselvi D, Gomathi V, Sowmiya R, IEEE Xplore, Page(s): 1070 1074, February 2023. DOI: 10.1109/ICACRS55517.2022.10029062.
- 22. "A Sentimental Analysis of Legal Documents using Deep Learning Approach", Shunmuga Lakshmi Priya. K, Thamarai Selvi. D, **Kalaiselvi. S**, Gomathi. V, IEEE Xplore, Pg. 1212 1219, February 2023. DOI: 10.1109/ICACRS55517.2022.10029322.
- 23. "Road segmentation from remote sensing images using fuzzy based convolutional neural network", J. Hepzibah, **S. Kalaiselvi**, V. Anitha, V. Gomathi, AIP Conference Proceedings, 2444, 040007, March 2022. DOI: <a href="https://doi.org/10.1063/5.0078336">https://doi.org/10.1063/5.0078336</a>.

- 24. "Air quality prediction using remote sensing", R. Raja Selvi, M. Shruthi, G. Nithya, S. Kalaiselvi, M. Jayalakshmi, V. Gomathi, AIP Conference Proceedings, 2444, 040005, March 2022. DOI: https://doi.org/10.1063/5.0078338.
- "Intelligent sales prediction using ARIMA techniques", K. N. Manikandan, A. Saranya, D. Jothi Deetshiha, K. Sushmitha, Dharani, V. Anitha, S. Kalaiselvi, AIP Conference Proceedings, 2444, 040006, March 2022. DOI: <a href="https://doi.org/10.1063/5.0078379">https://doi.org/10.1063/5.0078379</a>.
- 26. "Prognosticating clinical incidents via recurrent neural networks by using clinical doctor AI", European Journal of Molecular & Clinical Medicine, Vol. 08, Issue 03, 2021.
- 27. "Applying Government Schemes in Rural Sectors Prediction System for Evaluation of Data Science Algorithm", S. Maheswari, S. Kalaiselvi, D. Thamarai Selvi, M. Manochitra, International Journal of Recent Technology and Engineering (IJRTE), PP: 70-79, Vol-9 Issue-5, January 2021. DOI: 10.35940/ijrte.E5140.019521.
- 28. "Change Detection from Remotely Sensed Images using Fuzzy Distance Measure", R.Kanaga Rathnam, **S.Kalaiselvi**, Dr.V.Gomathi, Dr.K.G. Srinivasagan, International Journal of Advance Research In Science And Engineering (IJARSE), Vol. No.4, Special Issue (02), ISSN-2319-8354(E), March 2015.
- 29. "An efficient method for crowd event recognition based on motion patterns", C. Rajanayaki Sindhuja, K.G. Srinivasagan, **S. Kalaiselvi**, IEEE Xplore, Page(s): 1 6, December 2014. DOI: 10.1109/ICRTIT.2014.6996124.
- 30. "Unsupervised monitoring of urban land use and land cover change detection in multitemporal images", N. Sathya, **S. Kalaiselvi**, V. Gomathi, K.G. Srinivasagan, IEEE Xplore, Page(s): 1 5, September 2014. DOI: 10.1109/ECS.2014.6892722.

### **International & National Conference Participations**

- Predicting Landuse Landcover Dynamics of Urban Growth using CA Markov Model at ISERDM -2023 organized by NIT Trichy and C- DAC, Tiruvananthapuram during 09.01.2023 to 11.01.2023.
- 2. Convolutional Neural Network for Remote Sensing Classification at ICRACIA 2021 organized by M.Kumarasamy College of Engineering on 31.03.2021.
- 3. Blood Pressure Monitoring System During Pregnancy at ICCET'19 organized by Prince Sri Venkatewara Padmavathy Engineering College on 09.03.2019.
- 4. Kernel Based FCM for Change Detection in Multitemporal Remote Sensing Images at ICCCI" 16 organized by Alagappa Chettiar College of Engineering, Karaikudi on 06.10.2016.
- 5. Classification of Landuse Images using Deep Learning Networks on ICIIECS" 16 organized by Karpagam College of Engineering, Coimbatore during 17th & 18th March 2016.
- 6. Land use Land cover Classification of remotely sensed data using Object Based Segmentation at ICIIECS'15 organized by Karpagam College of Engineering, Coimbatore on 15.03.2015.

- 7. Change Detection from Remotely Sensed Images using Fuzzy Distance Measure at ICCTRD"15 organized by SCAD College of Engineering, Tirunelveli on 12.02.2015.
- 8. Urban post conflict change classification performance using optimal wavelet features in Self organizing feature map at ICRTIT"14 organized by Madras Institute of Technology, Chennai during April 2014.
- 9. An Efficient Method for Crowd Event Recognition based on Motion Patterns on ICRTIT"14 organized by Madras Institute of Technology, Chennai during April 2014.
- 10. Unsupervised Monitoring of Urban Land use and Land cover change detection in Multi temporal images on ICECS"14 organized by Karpagam College of Engineering, Coimbatore during 13th & 14th February 2014.
- 11. A Registration Technique for Medical Images using Fuzzy SIFT Matching at ICIIECS"14 organized by Karpagam College of Engineering, Coimbatore during 13<sup>th</sup> & 14<sup>th</sup> March 2014.
- 12. Unsupervised Change Detection of Tumor in Medical Images on BSSI"12 organized by IIT Chennai on 29.11.2012.
- 13. Unsupervised Change detection using UDWT and neural networks on ICACC"12 organized by Teja Sakthi Institute of Technology for Women, Coimbatore during 9<sup>th</sup> & 10<sup>th</sup> January 2012.
- 14. Multi-view based Human Activity Recognition using discrete hidden markov models on ICONCT "09 organized by Mepco Engineering College, Sivakasi on 9th December 2009.
- 15. Land use Land cover Classification of remotely sensed data using Multi-Scale Segmentation on NCACM'15 held at Anna university, Coimbatore Region during March 2,3 2015.
- 16. An Efficient Crowd Behavior Recognition using Motion Patterns for Intelligent Video Surveillance on ETCCT'14 held at Coimbatore Institute of Technology, Coimbatore during 03.03.2014 & 04.03.2014.
- 17. Fuzzy rule based classification of multispectral images using SOM on VISION"13 held at Government College of Engineering, Tirunelveli during March 2013.
- 18. Clustering Based Registration of Remotely Sensed Data on VISION"13 held at Government College of Engineering, Tirunelveli during March 2013.
- 19. Unsupervised Change Detection in Multitemporal satellite images using Undecimated Discrete Wavelet Transform on NLC IPC"11 organized by PSG College of Technology and PSG Ploytechnic, Coimbatore during 17th & 18th November 2011.
- 20. Spatial Transform Invariant Human Activity Recognition on MEPCOIT"09 held at Mepco Engineering College, Sivakasi on 13th March 2009.

## Research Facilities Created / Initiated

• Established "Centre of Image Processing Lab", through NEC Seed Money Proposal (Rs. 4.62 Lakhs)

### **Technical Events Organized**

| S. No | Title                                                                                               | Grant Details                 | Venue                                    | Duration                                                     |
|-------|-----------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|--------------------------------------------------------------|
| 1.    | Front end essentials                                                                                | Self - Supported              | National Engineering<br>College          | 28.03.2025 & 29.03.2025                                      |
| 2.    | IEEE CS Sponsored one day project exhibition – IEEEPROEXPO"23                                       | IEEE-CS Madras<br>Rs.10,000/- | National Engineering<br>College - Online | 13.10.2023                                                   |
| 3.    | AICTE sponsored ATAL FDP on<br>Predictive Intelligence Models and<br>its Applications               | AICTE -<br>Rs.93,000          | National Engineering<br>College - Online | 12.07.2021 to<br>16.07.2021                                  |
| 4.    | NVIDIA - DLI Workshop in<br>Fundamentals of Deep Learning                                           | Intra College<br>Programme    | National Engineering<br>College          | 17.04.2021                                                   |
| 5.    | Infosys Seminar- Overview of Python                                                                 | Intra College<br>Programme    | National Engineering<br>College          | 12.09.2019                                                   |
| 6.    | Infosys Seminar – Industry<br>Perspectives                                                          | Intra College<br>Programme    | National Engineering<br>College          | 10.09.2019                                                   |
| 7.    | Insights into Machine Learning and Deep Learning Approaches                                         | Self - Supported              | National Engineering<br>College          | 19.07.2019 to 20.07.2019                                     |
| 8.    | AICTE Approved workshop on "AI & Deep Learning", technically sponsored by Bennett University, Noida | Self - Supported              | National Engineering<br>College          | 28.12.2018 to 30.12.2018                                     |
| 9.    | Infosys - Seminar on Artificial<br>Intelligence                                                     | Intra College<br>Programme    | National Engineering<br>College          | 12.12.2017                                                   |
| 10.   | Infosys - Seminar on Software<br>Testing                                                            | Intra College<br>Programme    | National Engineering<br>College          | 27.09.2017                                                   |
| 11.   | Infosys- Train the Trainers<br>Workshop for FA2 - DBMS                                              | Intra College<br>Programme    | National Engineering<br>College          | 02.11.2015 to 04.11.2015                                     |
| 12.   | Matlab Applications for Engineering                                                                 | Self - Supported              | National Engineering<br>College          | 22.08.2014 to 23.08.2014                                     |
| 13.   | Hands on training in Matlab                                                                         | Self – Supported              | National Engineering<br>College          | 23.08.2013 to<br>24.08.2013<br>& 30.08.2013 to<br>31.08.2013 |
| 14.   | Advancements In Image Processing<br>Towards Research                                                | Self - Supported              | National Engineering<br>College          | 16.03.2013                                                   |
| 15.   | Exploring Matlab                                                                                    | Self - Supported              | National Engineering<br>College          | 20.10.2012                                                   |
| 16.   | Insight into Matlab                                                                                 | Self - Supported              | National Engineering<br>College          | 16.09.2012                                                   |

# **Technical Events Attended**

| S. No | Title                                   | Venue                           | Duration      |  |
|-------|-----------------------------------------|---------------------------------|---------------|--|
| 1.    | Geospatial Intelligence: Applications & | Indian Institute of Information | 1.06.2025 to  |  |
|       | Challenges in the Big Data Era          | Technology Sri City             | 14.06.2025    |  |
| 2     | Unleashing the Power of Generative      | Puducherry Technological        | 10.02.2025 to |  |
| ۷.    | AI                                      | University, Puducherry          | 15.02.2025    |  |
| 3.    | NPTEL - Business Analytics & Data       | National Engineering College,   | Jul-Aug 2024  |  |
|       | Mining Modeling using R Part II         | Kovilpatti                      |               |  |
| 4.    | AI/ML for Geodata Analysis              | Indian Institute of Remote      | 19.08.2024 to |  |
|       |                                         | Sensing - Online                | 23.08.2024    |  |

| S. No | Title                                                                                     | Venue                                                                                | Duration                    |
|-------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------|
| 5.    | Deep Learning for Natural Language<br>Processing                                          | National Institute of Technology,<br>Trichy                                          | 18.12.2023 to 22.12.2023    |
| 6.    | Data Science Tools                                                                        | SRM Institute of Science and<br>Technology, Tiruchirapalli                           | 12.07.2023 to 01.08.2023    |
| 7.    | Industry Know How                                                                         | Alpha Solutions, Tirunelveli                                                         | 17.04.2023 to 21.04.2023    |
| 8.    | Artificial Intelligence Machine<br>Learning and Deep learning                             | National Institute of Technology,<br>Warangal                                        | 27-01-2023 to 31-01-2023    |
| 9.    | ATAL FDP on Artificial Intelligence and Machine Learning for Healthcare                   | College of Engineering, Pune                                                         | 13.12.2021 to<br>17.12.2021 |
| 10.   | Machine learning with Azure ML                                                            | Coursera course                                                                      | Nov 2021                    |
| 11.   | Develop a company website with Wix                                                        | Coursera course                                                                      | Sep 2021                    |
| 12.   | TTT on Program on Creating<br>Microsite on Infosys Springboard                            | Infosys - Online                                                                     | 31.08.2021 to 02.09.2021    |
| 13.   | Fundamentals of Deep Learning                                                             | NVIDIA -DLI - Online                                                                 | 17.04.2021                  |
| 14.   | Overview of Geopreocessing using Python                                                   | Indian Institute of Remote<br>Sensing - Online                                       | 18.01.2021 to 29.01.2021    |
| 15.   | Online FDP on Internet of Things                                                          | NITK- STEP - Online                                                                  | 16.07.2020 to<br>18.07.2020 |
| 16.   | Step into RPA                                                                             | GUVI's Skill-a-thon                                                                  | 01.06.2020                  |
| 17.   | C++ for C programmers                                                                     | Coursera Course                                                                      | May 2020                    |
| 18.   | Introduction to Data science Python                                                       | Coursera Course                                                                      | May 2020                    |
| 19.   | Python Django Web Development :To<br>Do App                                               | Udemy Course                                                                         | Apr 2020                    |
| 20.   | Business Analytics and its<br>Applications using R                                        | National Institute of Technology,<br>Trichy                                          | 28.09.2019 to 02.10.2019    |
| 21.   | NPTEL - Python for Data Science                                                           | National Engineering College,<br>Kovilpatti                                          | Aug-Sep 2019                |
| 22.   | FDP on Introduction to Python Programming                                                 | National Engineering College,<br>Kovilpatti                                          | 01.08.2019 to<br>03.08.2019 |
| 23.   | Scilab Workshop                                                                           | Teaching Learning Centre, IIT<br>Bombay- National Engineering<br>College, Kovilpatti | 04.05.2019                  |
| 24.   | Industry Know How Program on<br>Machine Learning                                          | Vyakya Technologies, Chennai                                                         | 18.03.2019 to 22.03.2019    |
| 25.   | Workshop on Deep Learning - AI                                                            | KLE Technological University,<br>Hubli                                               | 11.08.2018 to<br>13.08.2018 |
| 26.   | NPTEL - Deep Learning                                                                     | National Engineering College,<br>Kovilpatti                                          | July - October<br>2018      |
| 27.   | GIAN course on Advance level course<br>on Remote Sensing Image Processing<br>and Analysis | NITK Surathkal, Mangalore                                                            | 16.11.2017 to 20.11.2017    |
| 28.   | Deep Learning                                                                             | Mepco Schlenk Engineering<br>College, Sivakasi                                       | 29.07.2017                  |
| 29.   | Technology enabled Teaching learning process                                              | National Engineering College,<br>Kovilpatti                                          | 27.05.2017 to<br>29.05.2017 |

| S. No | Title                                                                          | Venue                                           | Duration                    |
|-------|--------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------|
| 30.   | NPTEL - Programming, Data<br>structures and Algorithms using<br>Python         | National Engineering College,<br>Kovilpatti     | Jan - Mar 2017              |
| 31.   | Infosys - UI Technologies                                                      | K.S.R.College of Engineering,<br>Tiruchengode   | 29.03.2017 to 31.03.2017    |
| 32.   | Tech Mahindra- FDP                                                             | Tech Mahindra Ltd. Chennai                      | 14.02.2017 to<br>16.02.2017 |
| 33.   | Infosys - Foundation Program 5.0                                               | Infosys Ltd. Chennai                            | 26.12.2016 to 30.12.2016    |
| 34.   | Recent Trends in Optimization Techniques and its Applications                  | Mepco Schlenk Engineering<br>College, Sivakasi  | 05.12.2016 to 06.12.2016    |
| 35.   | Bhuvan Overview Training                                                       | National Remote Sensing<br>Centre, Hyderabad    | 22.03.2016 to 23.03.2016    |
| 36.   | Train the Trainers on Python Programming                                       | Saveetha Engineering College,<br>Chennai        | 18.05.2015 to 20.05.2015    |
| 37.   | Research Methodology                                                           | Anna University, Chennai                        | 15.12.2014                  |
| 38.   | Data base Management System                                                    | Anna University, Tirunelveli<br>Region          | 04.12.2013 to 10.12.2013    |
| 39.   | Research: A Perspective                                                        | National Engineering College,<br>Kovilpatti     | 30.11.2012 to 01.12.2012    |
| 40.   | Recent Trends and Research Issues in<br>Semantic Based Image Analysis          | Mepco Schelenk Enginneering<br>College, Sivaksi | 10.10.2012 to<br>11.10.2012 |
| 41.   | Soft computing techniques using Matlab                                         | Dr.G.U.Pope Engineering College,<br>Sawyerpuram | 16.03.2012                  |
| 42.   | Prospective issues and methodologies in Human Machine Interaction              | National Engineering College,<br>Kovilpatti     | 17.05.2010 to 21.05.2010    |
| 43.   | Soft Computing and Mathematical Modeling                                       | Gandhigram Rural University,<br>Dindigul        | 15.02.2010 to 20.02.2010    |
| 44.   | Research Issues and Challenge on<br>Image Processing towards Remote<br>Sensing | National Engineering College,<br>Kovilpatti     | 04.12.2009 to 05.12.2009    |
| 45.   | DB2 Technologies                                                               | National Engineering College,<br>Kovilpatti     | 19.11.2009 to 21.11.2009    |

# **Expert Lectures Delivered**

- Delivered a session on "Machine Learning Algoirthms" on 27.03.2025 for ICMR, NIE Chennai
- Delivered a session on "Hadoop and MapReduce" on 14.03.2025 for NIT Surathkal
- Delivered a session on "Artificial Intelligence on Military Cyber Security: Threats and Solutions", for a DRDO sponsored Seminar organized at Sethu Institute of Technology, Kariapatti on 13.06.2024.
- Delivered a Webinar on "Programming in Java", at VIT Bhopal on 05.01.2024.
- Delivered a Webinar on "Deep Learning", at Francis Xavior Engineering College, Tirunelveli on 30.10.2023.
- Delivered a session on "Numpy", during the six days Anna University sponsored Workshop on "Introduction to Data Science", at Anna University, Tirunelveli Region on 24.08.2023.

- Delivered a session on "Machine Learning", during the two days Workshop on "Computational Tools for Research", at Kristu Jayanthi College, Bangalore on 07.10.2021.
- Acted as a Resource Person for IEEE Madras Section sponsored two-day online Workshop on "Data Science using Python", held at Department of Computer Science & Engineering, National Engineering College during 29.01.2021 and 30.01.2021.
- Acted as a Resource Person for IEEE Madras Section Sponsored two-day online Workshop on "Machine Learning using Python", held at Department of Computer Science & Engineering, National Engineering College during 31.01.2020 and 01.02.2020.
- Delivered a Guest Lecture on "Insights into Machine Learning and Deep Learning Approaches", at National Engineering College, Kovilpatti on 19.07.2019.
- Acted as a Resource Person for "Hands on training in the applications of Image processing using Fuzzy Logic", at National Engineering College, Kovilpatti on 12.02.2019.
- Acted as a Resource Person for Hands on workshop on "Digital Image Processing using MATLAB", at National Engineering College, Kovilpatti on 15.09.2015.
- Acted as a Resource Person for "Matlab Applications for Engineering", at National Engineering College, Kovilpatti during 22.08.2014 to 23.08.2014.
- Acted as a Resource Person for "Hands on training in Matlab", at National Engineering College, Kovilpatti during 23.08.2013 to 24.08.2013 and 30.08.2013 to 31.08.2013.
- Delivered a Guest Lecture on "Exploring Matlab", at National Engineering College, Kovilpatti on 20.10.2012.
- Delivered a Guest Lecture on "Insight into Matlab", at National Engineering College, Kovilpatti on 16.09.2012.

#### Awards / Appreciation

- 5% Topper in the NPTEL course on NPTEL course Business Analytics & Data Mining Modeling using R Part II July to August 2024.
- Oracle Cloud Infrastructure 2024 Generative AI Certified Professional
- Acted as a Proctor in IEEEXtreme 17.0 programming competition on 29th October 2023.
- Best SPoC award received from Infosys in 2017.
- Recognized as GOLD partner under Infosys Insprie-The Campus Connect Model in 2016,2017 and 2018.

#### Reviewer

- Elsevier ASOC
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- Remote Sensing Letters
- Frontiers in Environmental Science
- International Journal of Thermo fluids
- ECTI Transactions on Computer and Information Technology

# Specific / Remarkable Credentials in Academic & Administration

- Developed and overseeing software solutions for,
  - HR Payroll Management
  - Academic Module
  - Recruitment Portal (NEC, LAPC, KR Arts)
  - Staff Performance Appraisal Portal (NEC, LAPC, KR Arts)
  - Grievance Portal (NEC, LAPC)
  - CBCS
  - R & D Portal
  - UPS management
  - Service Rules
  - Student Feedback
  - EB Bill assessment
- Representing as College Website Coordinator
- Acting as ERP Coordinator
- Managing IOBPAY fee management for LAPC & KR Arts
- Acting as Infosys SPoC
- Worked as a Mentor in IMS project with Bizpluss Pvt Ltd from April 2019 to Dec 2021
- Associating in NBA & NAAC works
- Contributed in AICTE & Anna University Affiliation works