

1. Name : K.SUJATHA

2. Date of Birth : 23.07.78

	<b>Dr. K. Sujatha</b>	<b>Professor, Department of Electrical &amp; Electronics Engineering</b>
	<b>Scopus ID</b>	<a href="https://www.scopus.com/authid/detail.uri?authorId=36643006900">https://www.scopus.com/authid/detail.uri?authorId=36643006900</a>
	<b>Google Scholar</b>	<a href="https://scholar.google.co.in/citations?user=xZg4XdUAAA&amp;hl=en">https://scholar.google.co.in/citations?user=xZg4XdUAAA&amp;hl=en</a>
	<b>Publons ID</b>	<a href="https://publons.com/researcher/1562562/sujatha-kesavan/">https://publons.com/researcher/1562562/sujatha-kesavan/</a>
	<b>Research gate ID</b>	<a href="#">ResearcherID: N-7447-2014</a>
	<b>Orcid ID</b>	<a href="https://orcid.org/0000-0003-2417-0760">https://orcid.org/0000-0003-2417-0760</a>

3. Educational qualification

S.No	Name of the course	Name of the Institute/ university	Academic year	Class/CGPA
1.	B.E./EEE	IRTT/Bharathiyar University	1999	72.02% I class
2.	<b>M.E./Applied Electronics</b>	Dr. M.G.R. Engineering College/Anna University	2004	75% I class/Distinction
3.	Ph.D	Anna University	2011	<b>Faculty of Information &amp; Communication</b>
4.	Post Doctoral Fellow	Lincoln University College, Malaysia	2025	<b>Computer Science Engineering</b>

4. Work experience : Teaching – 26.5 years

5. Area of Specialization : **Applied Electronics**

S.No	Designation	Institution	Department	Period of service	Total service
1.	Professor	Dr. M.G.R Educational & Research Institute	Electrical & Electronics Engineering	2009 to till date	6 years
2.	Asst. Professor	Easwari Engineering College	Electronics & Instrumentation Engineering	2007 to 2009	2.5 years
3.	Asst. Professor	Dhanalakshmi College of Engineering	Electronics & Communication Engineering	2006 - 07	1 year
4.	Asst. Professor & Senior Lecturer	Dr. M.G.R. Engineering College	Electronics & Communication Engineering	2004 - 2006	2 years
5.	Lecturer	Dr. M.G.R. Engineering College	Electrical & Electronics Engineering	1999 - 2004	5 years

6. Area of Research : Image Processing for process control

7. Scopus h-index for author : 10

Google Scholar index: 11

i10 Index: 1

- **Experience in teaching U.G. = 26.5 years**
- **Experience in teaching P.G. = 10 years**
- **Total teaching Experience = 26.5 years**
- **Research Experience = 13 years**

No. of Research Scholars under supervision – 8 candidates

No. candidates compled Ph.D – 8

Journal Publications

Year 2024-2025

S.No	Authors	Title	Journal	Year
1.	K. Sujatha	Hybrid Deep Learning Approach for Early Detection and Classification of Plant Diseases from Aerial View of Agricultural lands	Proceedings of the Indian National Science Academy	2025
2.	Jayalatsumi Umapathy;Kesavan Sujatha	Evolutionary Computation in Early Detection and Classification of Plant Diseases from Aerial View of Agricultural lands	Procedia Computer Science	2025
3.	Kavitha Ganesan;A Lavanya;Mythreyee Madhavan;Kamalahasan Murugan;Swapna B;E Kavitha	Enhancing Diagnosis, Treatment, and Patient Results Using Artificial Intelligence in Healthcare	Convergence of Internet of Medical Things (IoMT) and Generative AI	2025
4.	Kesavan Sujatha	Automated Early Detection of Diabetes Mellitus from Retinal Fundus Images Using Residual U-Net Approach	Deep Learning in Diabetes Mellitus Detection and Diagnosis	2025
5.	Latha B;Kesavan Sujatha	IOsE for Real Time Monitoring of Combustion Flames (RMCF) in Industrial Boilers	Lecture notes in networks and systems	2025
6.	Kesavan Sujatha;Godhavari Thiagarajan	An Enhanced Machine Learning Model for Reliable and Secured Environment to Handle Attacks in Cloud Environment	Lecture notes in networks and systems	2025
7.	Kesavan Sujatha;Saranya S;Tamilselvi Chandrasekaran	Smart Drone for Air Quality Monitoring and Forecasting Using Intelligent Systems for Multi-purpose Environment	Lecture notes in networks and systems	2025

8.	K. Sujatha	Hybrid Deep Learning Approach for Early Detection and Classification of Plant Diseases from Aerial View of Agricultural lands"	Proceedings of the Indian National Science Academy	2025
9.	Kesavan Sujatha;S Hemalatha;E Pavithra;S Mohana Sandhiya;L Keerthana Priyadharshini	Non-invasive Smart Mobile Application for Disease Detection from Human Fingernail Photography	Lecture Notes in Networks and Systems	2024
10.	Kannan Andi;Kesavan Sujatha;Naresh;N P G Bhavani	AI-Based Controller Design for Autopilot System of UAV	Evergreen	2024

#### Year 2023-2024

S.No	Authors	Title	Journal	Year
1.	Ethiraj Narasimhalu;Geetha Soman;Kesavan Sujatha;Subramanian Bhuvanewari;T Sivabalan;Kanya Nataraj	Deep Learning Neural Networks for Forecasting the Abrasive Wear in Machining Tools for Cryogenic Treatment by Process Parameter Optimization	Lecture Notes in Networks and Systems	2023
2.	Kavitha Esakimuthu;Geetha Soman;Latha B;George Victo Sudha George;Kesavan Sujatha	Mobile phone application for identification of nutrients and microbial contamination in fruits and vegetables	AIP Conference Proceedings	2023
3.	Kesavan Sujatha	Wearable Technology with Location Tracking, Health Monitoring, and Attendance Tracking for Employees	Lecture Notes in Networks and Systems	2023
4.	Gujjula Jhansi;Kesavan Sujatha	An Enhanced Machine Learning Technique with a Hybrid Metaheuristic Algorithm to Identify the Fish Disease	Wireless Personal Communications	2023
5.	Gujjula Jhansi;Kesavan Sujatha	HRFSVM: identification of fish disease using hybrid Random Forest and Support Vector Machine	Environmental Monitoring and Assessment	2023

6.	Kesavan Sujatha;George Victo Sudha George;Kanya Nataraj	Online Detection of Malnutrition Induced Anemia Color using Machine Learning from Nail Algorithms	Advances in Computing Communications and Informatics	2024
7.	Kanya Nataraj;Kesavan Sujatha;George Victo Sudha George	Online Detection of Malnutrition Induced Anemia from Nail Color using Machine Learning Algorithms	Exploration of Artificial Intelligence and Blockchain Technology in Smart and Secure Healthcare	2024
8.	Kesavan Sujatha;Kalpalatha Reddy T	UGVs for Agri Spray with AI assisted Paddy Crop disease Identification	Procedia Computer Science	2024
9.	Kesavan Sujatha;Kanya Nataraj;Rengammal Sankari Balasubramanian	Fish disease detection using a novel feature extraction algorithm	AIP Conference Proceedings	2024

S.No	Title of the Manuscript	Year
1.	K. Sujatha, (2023), "Machine Learning Algorithm for Trend Analysis in Short term Forecasting of COVID-19 using Lung X-ray Images", Journal of Physics: Conference Series, Vol. , no. , pp.1-10	2023
2.	K. Sujatha, (2023), "REINFORCEMENT LEARNING AND NATURAL LANGUAGE PROCESSING-BASED SYSTEM FOR AUTOMATIC IDENTIFICATION OF LUNG CANCER", Acta Biomedica de l'Ateneo Parmense, Vol. 94, no. 1, pp.1332-1346	2023
3.	K. Sujatha, (2023), "A Novel Fish Optimization Algorithm for Offshore Disease Detection in Fishes using a Smartphone App", 2022 International Conference on Automation, Computing and Renewable Systems (ICACRS), Vol. , no. , pp.912-918	2023
4.	K. Sujatha, (2023), "Internet of medical things for abnormality detection in infants using mobile phone app with cry signal analysis", Implementation of Smart Healthcare Systems using AI, IoT, and Blockchain, Vol. , no. , pp.169-191	2023
5.	K. Sujatha, (2023), "Design and development of a mobile application for level monitoring of oxygen cylinders using block chain technology", Distributed Computing to Blockchain, Vol. , no. , pp.415-424	2023

6.	K. Sujatha, (2023), "Innovation in Agriculture Industry by Automated Sorting of Rice Grains", EVERGREEN Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, Vol. 10, no. 01, pp.283-288	2023
7.	K. Sujatha, (2023), "Deep Learning Neural Networks for Detection of Onset Leukemia from Microscopic Images", Cognitive Science and Technology, Vol. , no. , pp.11-19	2023

S.NO	TITLE	Year
1	A Novel Fish Optimization Algorithm for Offshore Disease Detection in Fishes using a Smartphone App 2022 International Conference on Automation, Computing and Renewable Systems (ICACRS), Vol , I , B 912-E 918	2022
2	Automated real-time forecasting of agriculture using chlorophyll content and its impact on climate change Deep Learning for Sustainable Agriculture, Vol , I , B 169-E 198	2022
3	Multilayer Perceptron Mode and ANN to Assess the Economic Impact and Human Health Due to Alcoholism and Its Effect in Rural Areas Lecture Notes in Electrical Engineering, Vol 881, I , B 13-E 26	2022
4	Indigenous Non-invasive Detection of Malnutrition-Induced Anemia from Patient-Sourced Photos Using Smart Phone App Lecture Notes in Networks and Systems, Vol , I , B 431-E 440	2022
5	A Smart Phone App with Geo-Spatial Information for Forecasting COVID-19 from Lung X-ray Images Lecture Notes in Networks and Systems, Vol 401, I , B 431-E 439	2022
6	Hybrid deep learning neuro-fuzzy networks for industrial parameters estimation Artificial Intelligence and Machine Learning for EDGE Computing, Vol , I , B 325-E 341	2022
7	Combined Economic-Emission Dispatch of External Optimization Integrating Renewable Energy Resources Stochastic Wind and Solar ECS Transactions, Vol 107, I 1, B 7325-E 7338 SNIP0.268SJR0.235	2022
8	Deep Learning Neural Networks for Online Monitoring of the Combustion Process From Flame Colour in Thermal Power Plants Convergence of Deep Learning and Internet of Things, Vol , I , B 224-E 244	2022
9	Swarm Intelligence-based Framework for Image Segmentation of Knee MRI Images for Detection of Bone Cancer Swarm Intelligence and Machine Learning, Vol , I , B 95-E 115	2022
10	Swarm Intelligence for Diagnosis of Arrhythmia and Cardiac Stenosis Swarm Intelligence and Machine Learning, Vol , I , B 150-E 164	2022
11.	Internet of medical things for abnormality detection in infants using mobile phone app with cry signal analysis, Implementation of Smart Healthcare Systems using AI, IoT, and Blockchain, 2022, pp. 169–191	2022

Name of the Research Faculty	Title	Year	Journal Name
Dr. K. Sujatha	Monitoring power station boilers using ANN and image processing,	2013	<b>ADVANCED MATERIALS RESEARCH</b> Vol. 631-632, no., pp.1154-1159 <b>Trans Tech Publishers</b> <b>H index: 43</b>
	Intelligent parallel networks for combustion quality monitoring in power station boilers,	2013	<b>ADVANCED MATERIALS RESEARCH</b> Vol. 699, no.pp.893-899 <b>Trans Tech Publishers</b> <b>H index: 43</b>
	An effective distributed service model for image based combustion quality monitoring and estimation in power station boilers,	2016	<b>LECTURE NOTES IN ELECTRICAL ENGINEERING</b> , Vol. 362, no. -, pp.33-49  <b>SPRINGER</b> <b>H index: 36</b>
	Discrete wavelet based decomposition of brain image for de-noising and resolution enhancement,	2016	<b>ARNP JOURNAL OF ENGINEERING AND APPLIED SCIENCES</b> Vol. 11, no. 21, pp.12549-12554 <b>H index: 33</b>
	Lighting electrical energy audit and management in a commercial building,	2017	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING</b> , Vol. 467, no. -, pp.463-474  <b>SPRINGER</b> <b>H index: 48</b>
	Combustion Quality Monitoring in PS Boilers Using Discriminant RBF,	2011	ISA Transactions, <i>Elsevier</i> , Vol.2(7), pp.2623-2631 <b>IF: 5.46</b> <b>H index: 88</b>
Dr. K. Sujatha	Soft Sensor for Flame Temperature Measurement and IoT based Monitoring in Power	2018	<b>MATERIALS TODAY: PROCEEDINGS</b> Vol. 5, no. 4, pp.10755-10762

	Plants,		<b>ELSEVIER</b> <b>H index: 56</b>
	Soft Sensor for Capacitance Tracking in Quality Assurance of Fruit Ripening Process,	2018	<b>MATERIALS TODAY: PROCEEDINGS</b> , Vol. 5, no. 10, pp.20785-20792 <b>ELSEVIER</b> <b>H index: 56</b>
	Automation of railway engine pilot security system using multimodal biometric identification,	2018	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING [INTERNATIONAL]</b> , Vol. 625, no. , pp.1-12 <b>SPRINGER</b> <b>H index: 48</b>
	Versatile inertial weight based PSO for estimation of quality ripening of fruits,	2018	<b>JOURNAL OF ADVANCED RESEARCH IN DYNAMICAL AND CONTROL SYSTEMS</b> , Vol. 10, no. 11 Special Issue, pp.924-939 <b>H index: 23</b>
	Pollution control by monitoring of so x and no x emissions using smart sensors,	2018	<b>POLLUTION RESEARCH</b> , Vol. 37, no. 3, pp.678-683 <b>H index: 48</b>
	IoT-based multimodal biometric identification for automation railway engine pilot security system,	2018	<b>SMART INNOVATION, SYSTEMS AND TECHNOLOGIES [INTERNATIONAL]</b> , Vol. 77, no. -, pp.147-154 <b>SPRINGER</b> <b>H index: 24</b>
	Hybrid electric vehicle emissions monitoring and estimation using artificial neural networks: Technical note,	2019	<b>INTERNATIONAL JOURNAL OF VEHICLE STRUCTURES AND SYSTEMS</b> , Vol. 11, no. 3, pp.259-261 <b>H index: 18</b>
	Detection of	2019	<b>INTERNATIONAL</b>

	vehicular traffic using convolutional neural networks,		<b>JOURNAL OF INNOVATIVE TECHNOLOGY AND EXPLORING ENGINEERING</b> , Vol. 8, no. 10, pp.1423-1426 <b>H index: 40</b>
	Diagnosis of fish disease using ukf and elman neural networks,	2019	<b>INTERNATIONAL JOURNAL OF ENGINEERING AND ADVANCED TECHNOLOGY</b> , Vol. 8, no. 3, pp.438-441 <b>H index: 38</b>
	An Approach to Wireless Sensor Networks for Healthcare Scrutiny in Hospitals,	2019	<b>LECTURE NOTES IN NETWORKS AND SYSTEMS</b> , Vol. -, no. -, pp.341-350 <b>SPRINGER</b> <b>H index: 22</b>
Dr. K. Sujatha	Foetal Heartbeat and Volume Detection Using Spherical Harmonics Shape Model for Level Set Segmentation,	2019	<b>LECTURE NOTES IN NETWORKS AND SYSTEMS</b> , Vol. 40, no. -, pp.351-358 <b>SPRINGER</b> <b>H index: 22</b>
	Estimation of Microwave Dielectric Constant Using Artificial Neural Networks,	2019	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING</b> , Vol. 841, no. -, pp.41-46 <b>SPRINGER</b> <b>H index: 48</b>
	Vision machine learning for detection of ocular pathologies from iris images,	2020	<b>JOURNAL OF DISCRETE MATHEMATICAL SCIENCES AND CRYPTOGRAPHY [NATIONAL]</b> , Vol. 23, no. 1, pp.145-155 <b>TAYLOR &amp; FRANCIS</b> <b>H index: 18</b>
	Automated Road Surface Condition Monitoring System Using Machine Vision Technology,	2020	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING</b> , Vol. 933, no. -, pp.129-138 <b>SPRINGER</b>

			<b>H index: 48</b>
	Hepatoprotective activity of the biherbal extract in carbon tetrachloride (CCl4) Induced Hepatotoxicity—A Study of Histopathological Image Analysis,	2020	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING, Vol. 910, no. -, pp.269-287 SPRINGER H index: 48</b>
Dr. K. Sujatha	Smart Imaging System for Tumor Detection in Larynx Using Radial Basis Function Networks,	2020	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING [INTERNATIONAL], Vol. 1108, no. , pp.1371-1377 SPRINGER H index: 48</b>
	Image Processing Technique for Effective Analysis of the Cytotoxic Activity in Human Breast Cancer Cell Lines – MCF-7,	2020	<b>ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING [INTERNATIONAL], Vol. 1200, no. , pp.44-53 SPRINGER H index: 48</b>
	Analysis of CT images for detection of Colorectal Cancers using Hybrid Artificial Neural Networks and Fire Fly Algorithm,	2020	<b>PROCEDIA COMPUTER SCIENCE , Vol. 171, no. , pp.1517-1526 ELSEVIER H index: 92</b>
	Precision manufacturing technology and measurements in steel rolling industry using multi threshold fast fourier transform and back propagation algorithm for analysis of X-ray diffractometry,	2020	<b>MATERIALS TODAY: PROCEEDINGS [INTERNATIONAL], Vol. 38, no. , pp.2624-2628 ELSEVIER H index: 56</b>

	Content-Based Image Retrieval for Detection of Endometrial Cancer Using Radial Basis Function Network,	2021	<b>LECTURE NOTES ON DATA ENGINEERING AND COMMUNICATIONS TECHNOLOGIES, Vol. 59, no. , pp.299-305 SPRINGER H index: 17</b>
	Electronic Aid Design of Fruits Image Classification for Visually Impaired People,	2021	<b>SMART INNOVATION, SYSTEMS AND TECHNOLOGIES , Vol. 196, no. , pp.727-734 SPRINGER H index: 27</b>
	Detection of Ocular Pathologies From Iris Images Using Blind De-Convolution and Fuzzy C-Means Clustering: Detection of Ocular Pathologies,	2021	<b>AI INNOVATION IN MEDICAL IMAGING DIAGNOSTICS, Vol. , no. , pp.1-36 SPRINGER H index: 22</b>
	Prediction of Indian River Water Temperature Using Convolutional Neural Network and Reliable Data Transmission Using IoT,	2021	<b>MACHINE INTELLIGENCE AND SMART SYSTEMS , Vol. , no. , pp.97-104 SPRINGER</b>
	Enchodroma Tumor Detection From MRI Images Using SVM Classifier,	2021	<b>AI INNOVATION IN MEDICAL IMAGING DIAGNOSTICS [INTERNATIONAL], Vol. , no. , pp.155-163 SPRINGER</b>
Dr. K. Sujatha	Predictive Model-based Analytics to Control Drying Process in a Sugar Industry,	2022	<b>LECTURE NOTES IN NETWORKS AND SYSTEMS , Vol. 286, no. , pp.419-426 SPRINGER H index: 22</b>

	A Smart Phone App with Geo-Spatial Information for Forecasting COVID-19 from Lung X-ray Images	2022	Information and Communication Technology for Competitive Strategies <b>SPRINGER</b>
	Indigenous Non-invasive Detection of Malnutrition-Induced Anemia from Patient-Sourced Photos Using Smart Phone App	2022	Information and Communication Technology for Competitive Strategies <b>SPRINGER</b>

#### Conference Publications

Name of the Research Faculty	Title	Year	Conference/Journal Name
Dr. K. Sujatha	Automatic tap changing in transformers for power quality enhancement in a smart grid distribution system,	2016	INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONICS, AND OPTIMIZATION TECHNIQUES, ICEEOT 2016 [INTERNATIONAL], Vol. -, no. -, pp.4458-4463 <b>IEEE XPLORE</b>
	Cloud computing for autonomous navigation of unmanned ground vehicle,	2016	INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONICS, AND OPTIMIZATION TECHNIQUES, ICEEOT 2016 [INTERNATIONAL], Vol. -, no. -, pp.3790-3795

			<b>IEEE XPLORE</b>
	Big data analytics of IoT based Health care monitoring system,	2017	2016 IEEE UTTAR PRADESH SECTION INTERNATIONAL CONFERENCE ON ELECTRICAL, COMPUTER AND ELECTRONICS ENGINEERING, UPCON 2016 [INTERNATIONAL], Vol. -, no. -, pp.55-60 <b>IEEE XPLORE</b>
Dr. K. Sujatha	Automation of solar system for Maximum Power Point tracking using Artificial Neural Networks and IoT,	2017	2016 IEEE UTTAR PRADESH SECTION INTERNATIONAL CONFERENCE ON ELECTRICAL, COMPUTER AND ELECTRONICS ENGINEERING, UPCON 2016 [INTERNATIONAL], Vol. -, no. -, pp.61-66 <b>IEEE XPLORE</b>
	Internet of things for flame monitoring power station boilers,	2017	PROCEEDINGS - TIMA 2017: 9TH INTERNATIONAL CONFERENCE ON TRENDS IN INDUSTRIAL MEASUREMENT AND AUTOMATION [INTERNATIONAL], Vol. , no. , pp.- <b>IEEE XPLORE</b>
	Impact of NOx emissions on climate and monitoring using smart sensor technology,	2018	PROCEEDINGS OF THE 2017 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATION AND SIGNAL PROCESSING, ICCSP 2017 [INTERNATIONAL],

			Vol. -, no. -, pp.853-856 <b>IEEE XPLORE</b>
Dr. K. Sujatha	Off-shore wind power as a pillar of energy transmission using IOT (OSWPETIOT),	2018	2017 INTERNATIONAL CONFERENCE ON ENERGY, COMMUNICATION, DATA ANALYTICS AND SOFT COMPUTING, ICECDS 2017 [INTERNATIONAL], Vol. -, no. -, pp.2494-2499 <b>IEEE XPLORE</b>
	Cloud Computing for image based Condition monitoring of road surface,	2018	INTERNATIONAL CONFERENCE ON INTELLIGENT DATA COMMUNICATION TECHNOLOGIES AND INTERNET OF THINGS [INTERNATIONAL], Vol. -, no. -, pp.1400-1406 <b>IEEE XPLORE</b>
	Analysis of distribution losses using FRTUs in distribution management system,	2018	2017 INTERNATIONAL CONFERENCE ON ENERGY, COMMUNICATION, DATA ANALYTICS AND SOFT COMPUTING, ICECDS 2017 [INTERNATIONAL], Vol. -, no. -, pp.2013-2018 <b>IEEE XPLORE</b>
	An assessment of potential windmills using image processing and artificial intelligence (AI) based wind speed	2018	2017 INTERNATIONAL CONFERENCE ON ENERGY, COMMUNICATION, DATA ANALYTICS

	estimation,		AND SOFT COMPUTING, ICECDS 2017 [INTERNATIONAL], Vol. -, no. -, pp.3770-3773 <b>IEEE XPLORE</b>
Dr. K. Sujatha	Role of ethylene in fruits ripening process,	2018	2017 INTERNATIONAL CONFERENCE ON ENERGY, COMMUNICATION, DATA ANALYTICS AND SOFT COMPUTING, ICECDS 2017 [INTERNATIONAL], Vol. -, no. -, pp.1916-1920 <b>IEEE XPLORE</b>
	Screening and Identify the Bone Cancer/Tumor using Image Processing,	2018	PROCEEDINGS OF THE 2018 INTERNATIONAL CONFERENCE ON CURRENT TRENDS TOWARDS CONVERGING TECHNOLOGIES, ICCTCT 2018 [INTERNATIONAL], Vol. -, no. -, pp.--- <b>IEEE XPLORE</b>
	Big Data Analytics for Medical Image Analysis in Screening and Detection of Pancreatic Tumor, PROCEEDINGS OF INTERNATIONAL CONFERENCE ON SUSTAINABLE COMPUTING IN SCIENCE, TECHNOLOGY AND MANAGEMENT [INTERNATIONAL],	2019	Big Data Analytics for Medical Image Analysis in Screening and Detection of Pancreatic Tumor, PROCEEDINGS OF INTERNATIONAL CONFERENCE ON SUSTAINABLE COMPUTING IN SCIENCE, TECHNOLOGY AND MANAGEMENT

	Vol. -, no. -, pp.---		[INTERNATIONAL], Vol. -, no. -, pp.--- <b>IEEE XPLORE</b>
	Modeling And Design Of Nano Scale Cmos Controller Using Adaptive Neuro-Fuzzy For Speed Control Of DC Shunt Motor,	2020	JOURNAL OF PHYSICS: CONFERENCE SERIES [INTERNATIONAL], Vol. 1455, no. , pp.- <b>WEB OF SCIENCE</b>
Dr. K. Sujatha	DETECTION OF EYE DISEASES USING IMAGE PROCESSING AND ARTIFICIAL NEURAL NETWORKS,	2020	ICT FOR COMPETITIVE STRATEGIES: PROCEEDINGS OF 4TH INTERNATIONAL CONFERENCE ON INFORMATION AND COMMUNICATION TECHNOLOGY FOR COMPETITIVE STRATEGIES (ICTCS 2019) [INTERNATIONAL], Vol. , no. , pp.15-20 <b>SPRINGER</b>
	Industrial Temperature Measurement of Flame and Flue gases using IOT and Image processing,	2021	IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING [INTERNATIONAL], Vol. , no. , pp.- <b>WEB OF SCIENCE</b>
	Furnace Flame Tracking for Combustion Quality Estimation in Coal Fired Boilers,	2021	IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING [INTERNATIONAL], Vol. , no. , pp.- <b>WEB OF SCIENCE</b>

### Books and Book Chapters

Name of the Research Faculty	Title	Year	Publisher Name
Dr. K. Sujatha	Advances in Health and Disease <b>978-1-53612-070-7</b>	2020	Nova Publishers
	<b>Background, Implementation and Classification</b> 978-1-53618-164-7	2020	Nova Publishers
	<b>Signal Processing and Communication –A Laboratory Practice</b> <b>978-9389116-26-7</b>	2019	<b>Research India Publications</b>
	Applications of ANN-An Innovation in Learning Practice <b>978-620-2-19736-6</b>	2017	LAMBERT Publishing Services
	Cloud Computing for Image Based Condition Monitoring of Road Surface 978-3-030-03146-6	2018	<b>Charulatha publishers</b>
Dr. K. Sujatha	<b>Advanced hands on training lab manual</b> 978-3-030-03146-6	2017	<b>Research India Publications</b>
	<b>Applications of ANN-An Innovation in Learning Practice</b> <b>978-620-2-19736-6</b>	2017	<b>LAMBERT PUBLISHING SERVICES</b>
	<b>CONTROL STRATIGIES FOR HYBRID RENEWABLE ENERGY SYSTEMS</b> <b>978-81-932850-6-0</b>	2017	Springer
	Computational Vision and Bio-Inspired Computing 978-3-030-37217-0	2020	Taylor and Francis
	ICT for Competitive Strategies 9781003052098	2020	Taylor and Francis
	A Gist on Creativity	2017	RESEARCH INDIA PUBLICATIONS
	Impact of Green House Gases from Thermal Power Plants. Advanced Aspects of Engineering Research Vol. 3, pp. 92–103 <a href="https://doi.org/10.9734/bpi/aaer/v3/7659D">https://doi.org/10.9734/bpi/aaer/v3/7659D</a>	2021	Book Publisher International
	Segmentation of Spine Tumour Using K-Means and Active Contour and Feature Extraction Using GLCM, <b>AI INNOVATION IN MEDICAL IMAGING DIAGNOSTICS [INTERNATIONAL], Vol. , no. , pp.194-207</b>	2021	IGI Global
	<b>Swarm Intelligence and Machine Learning Applications in Healthcare -</b>	2022	Taylor & Francis

	<b>Swarm Intelligence-based Framework for Image Segmentation of Knee MRI Images for Detection of Bone Cancer</b>		
	ISBN 9781032145792		
	<b>Swarm Intelligence and Machine Learning Applications in Healthcare - Swarm Intelligence and Machine Algorithms for Diagnosis of Arrhythmia and Coronary Artery Disease</b>		Taylor and Francis
	ISBN 9781032145792	2022	

**Table 5.15. List of Books and book chapters**

<b>Sl. No</b>	<b>Name of the teacher</b>	<b>Title of the book/chapters published</b>	<b>Title of the paper</b>	<b>Year</b>	<b>ISBN/ISSN number of the proceeding</b>	<b>Name of the publisher</b>
1	K. SUJATHA	Advances in Health and Disease	Brain Tumor Detection and Diagnosis Using Biomedical Sensors and Secure Hybrid Cloud Architecture	2020	ISBN/ISSN number of the proceeding	Nova Publishers
2	K. SUJATHA	Background, Implementation and Classification	Image Based Maximum Power Point Tracking in Wind Energy Conversion Systems, Maximum Power Point Tracking	2020	978-1-53612-070-7	Nova Publishers
3	K. SUJATHA	Signal Processing and Communication –A Laboratory Practice	Signal Processing and Communication	2020	978-1-53618-164-7	Research India Publications

4	Dr.K.Sujatha, Dr.V.Karthikeyan	Real time data analytics for large scale sensor data	Soft sensor with shape descriptors for flame quality prediction based on LSTM Regression	2019	9.78935120143	Science Direct
5	Dr.K.Sujatha, Dr.V.Karthikeyan	Information and Communication Technology for Sustainable Development	Automated Road Surface Condition Monitoring System Using Machine Vision Technology	2019	9780128180143	Springer
6	Dr.K.Sujatha, Dr.V.Karthikeyan	Computational Vision and Bio-Inspired Computing	Smart Imaging System for Tumor Detection in Larynx Using Radial Basis Function Networks	2020	9780367570699	Springer
7	Dr.K.Sujatha, Dr.V.Karthikeyan	ICT for Competitive Strategies	Detection of Eye Diseases using Image Processing and Artificial Neural Networks	2020	978-3-030-37217-0	Taylor and Francis
8	Dr.E.Sheeba Percis, Dr.A.Nalini, Ms.S.Bhuvaneshwari, Ms.S.T.Rama, Ms.Swathi	Book of Abstract on Renewable Energy, Information Technology, Control Systems and Embedded Electronics	Book of Abstract on Renewable Energy, Information Technology, Control Systems and Embedded Electronics	2020	9781003052098	RESEARCH INDIA PUBLICATIONS
9	Dr. L. Ramesh	NA	A Review on Impact of Artificial Intelligence in Interconnected Microgrids	2020	NA	IEEE

10	Dr. L. Ramesh	Energy Usage and Stability Analysis of Industrial Feeder with ETAP	NA	2019	19733154	Springer, Cham
11	Dr. L. Ramesh	NA	Review and Key Challenges in Battery to Battery Power Management System	2019	978-3-030-32149-9 (Print) 978-3-030-32150-5 (Online)	IEEE
12	Dr. L. Ramesh	NA	Review on Smart Energy Meter for low cost design	2019	19733185	IEEE
13	Dr. L. Ramesh	Lighting electrical energy audit and management in a commercial building	NA	2019	19733248	Springer, Singapore
14	Dr. K Sujatha	AI Innovation in Medical Imaging Diagnostics	Enchodroma Tumor Detection From MRI Images Using SVM Classifier", AI Innovation in Medical Imaging Diagnostics, Vol. , no. , pp.155-163	2021	DOI: <a href="https://doi.org/10.4018/978-1-7998-3092-4.ch009">10.4018/978-1-7998-3092-4.ch009</a>	IGI Global
15	Dr. K Sujatha	Handbook of Nanomaterials for Sensing Applications	"Soft sensors for screening and detection of pancreatic tumor using nanoimaging and deep learning neural networks",	2021	DOI: <a href="https://doi.org/10.1016/b978-0-12-820783-3.00002-6">10.1016/b978-0-12-820783-3.00002-6</a>	Elsevier

			Handbook of Nanomaterials for Sensing Applications, Vol. , no. , pp.449-463			
16	Dr. K.Sujatha	"Swarm Intelligence-based Framework for Image Segmentation of Knee MRI Images for Detection of Bone Cancer",	Swarm Intelligence and Machine Learning, Vol. , no. , pp.95-115	2022	9781003240037	TAYLOR & FRANCIS
17	Dr. K.Sujatha	"Swarm Intelligence for Diagnosis of Arrhythmia and Cardiac Stenosis",	Swarm Intelligence and Machine Learning, Vol. , no. , pp.150-164	2022	9781003240037	TAYLOR & FRANCIS

## PATENTS

Name of the Research Faculty	Title	Year	Patent Details
Dr. K. Sujatha	A METHOD AND SYSTEM FOR DETECTING ENDOMETRIAL CANCER	2021	Innovation Patent 2021104536 Granted

## Projects

Name of the Research faculty	Title	Year	Project Details for Embedded Training and Learning
Dr. K.Sujatha	Simulation for Lung Mechanism	2022	MATLAB Simulink gives a practical way to model the functioning of lungs
	Simulation for Mathematical Modelling of Renal Function	2022	MATLAB Simulink gives a practical way to model and

			monitor the functioning of kidneys
	Simulation for Blood Glucose level Monitoring	2022	MATLAB Simulink gives a practical way to monitor and model the blood glucose level inside the human body
	SIMULATION OF HODGKIN- HUXLEY MODEL USING SIMULINK	2022	MATLAB Simulink gives a practical way to model the electrical properties of the neuron
Dr. K.Sujatha	Quasi-Newton Algorithms	2022	MATLAB Simulation to study the optimization model
	Predator-Prey Equations	2022	MATLAB code for Lotka Volterra Equations
	Maximum Likelihood Estimation	2022	MATLAB Simulation to study the optimization model
	MODELING OF BATCH FEED CULTURE	2021	Model of microbial fed-batch growth kinetics in MATLAB
	Smart Transducer	2020	PIR sensor with Arduino board using Tinker CAD - open source simulation package
	Radial Basis Function Network for Parameter Estimation using Furnace Flame Images	2019	MATLAB Simulation to study the characteristics of furnace flame in boilers
Dr. K.Sujatha	Soft sensors	2018	Measurement of flame temperature and flue gases from color of flame using MATLAB simulation

**Table 5.1. E-content developed by the faculty**

S.No	Dept	Name of the teacher	Name of the module	Platform on which module is developed	Date of launching E- content	Link to the relevant document
1	EEE	DR.K.SUJATHA	INTRODUCTION TO DIGITAL IMAGE PROCESSING	MOOC	15.9.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104004&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104004&amp;courseId=214284766&amp;clazzid=31401531</a>

2	EEE	DR. K. SUJATHA	FUNDAMEN TALS OF DIGITAL IMAGE PROCESSING	MOOC	17.9.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104010&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104010&amp;courseId=214284766&amp;clazzid=31401531</a>
3	EEE	DR. K. SUJATHA	IMAGE TRANSFORM ATION	MOOC	22.9.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104004&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104004&amp;courseId=214284766&amp;clazzid=31401531</a>
4	EEE	DR. K. SUJATHA	DISCRETE WAVELET TRANSFORM	MOOC	24.9.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104014&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344104014&amp;courseId=214284766&amp;clazzid=31401531</a>
5	EEE	DR. K. SUJATHA	IMAGE COMPRESSI ON	MOOC	29.9.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=365424370&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=365424370&amp;courseId=214284766&amp;clazzid=31401531</a>
6	EEE	DR. K. SUJATHA	IMAGE ENHANCEM ENT	MOOC	13.10.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=365424405&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=365424405&amp;courseId=214284766&amp;clazzid=31401531</a>
7	EEE	DR. K. SUJATHA	IMAGE RESTORATI ON	MOOC	27.10.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=34410628">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=34410628</a>

						<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344106292&amp;courseId=214284766&amp;clazzid=31401531">5&amp;courseId=214284766&amp;clazzid=31401531</a>
8	EEE	DR. K. SUJATHA	COLOR IMAGE PROCESSING	MOOC	29.10.2020	<a href="https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344106292&amp;courseId=214284766&amp;clazzid=31401531">https://mooc1.chaoxing.com/mycourse/teacherstudy?chapterId=344106292&amp;courseId=214284766&amp;clazzid=31401531</a>
9	EEE	DR. K. SUJATHA	DIGITAL CONTROL LAB	DIGI LEARNING APP	11.2.21	<a href="https://play.google.com/store/apps/details?id=com.witness.mgrdigilearnandroid">https://play.google.com/store/apps/details?id=com.witness.mgrdigilearnandroid</a>
10	EEE	DR. K. SUJATHA	TRANSDUCER ENGINEERING LAB	DIGI LEARNING APP	10.2.21	<a href="https://play.google.com/store/apps/details?id=com.witness.mgrdigilearnandroid">https://play.google.com/store/apps/details?id=com.witness.mgrdigilearnandroid</a>
11	EEE	DR. K. SUJATHA	LOAD FORECASTING USING ANN	DIGI LEARNING APP	28.6.21	<a href="https://play.google.com/store/apps/details?id=com.witness.mgrdigilearnandroid">https://play.google.com/store/apps/details?id=com.witness.mgrdigilearnandroid</a>
12	EEE	DR. K. SUJATHA	Artificial intelligence for power load forecasting	Youtube	14.12.21	<a href="http://youtube.com/watch?v=_pUye5MQ4CU">http://youtube.com/watch?v=_pUye5MQ4CU</a>
13	EEE	DR. K. SUJATHA	Design and analysis Control system	Youtube	Jan 24, 2021	<a href="https://www.youtube.com/watch?v=mksJcnrvORE">https://www.youtube.com/watch?v=mksJcnrvORE</a>
14	EEE	DR. K. SUJATHA	Introduction to controller in Bio process	Youtube	Jan 24, 2021	<a href="https://www.youtube.com/watch?v=IwK5yrvziv3Y">https://www.youtube.com/watch?v=IwK5yrvziv3Y</a>
15	EEE	DR. K. SUJATHA	SMART TRANSDUCERS	Youtube – MGR EEE VIDEOS	May 31, 2020	<a href="https://www.youtube.com/watch?v=iHWiCXa-t78&amp;t=1124s">https://www.youtube.com/watch?v=iHWiCXa-t78&amp;t=1124s</a>

### Ph.D Guidance for Research Scholars

S. No	Name	Title	Status
1.	Deepa Lakshmi B	MONITORING OF WINDMILLS USING IMAGE PROCESSING AND AI BASED WIND SPEED ESTIMATION	Completed 26.09.2017
2.	Sinthia P	MEDICAL IMAGE PROCESSING APPLICATIONS IN DIAGNOSIS OF BONE CANCER	Completed 04.12.2017
3.	Malathi	DIAGNOSIS OF BRAIN TUMOR USING IMAGE PROCESSING	Completed 25.01.2018
4.	Nallamilli P G Bhavani	ESTIMATION AND MONITORING OF COMBUSTION QUALITY PARAMETERS IN POWER PLANTS	Completed 02.11.2018
5.	Srividhya.V	Artificial Intelligence in evaluation of quality in fruits ripening	Completed 3.3.2021
6.	Gomathy. G	POWER MANAGEMENT TECHNIQUE FOR EMBEDDED SYSTEM BASED WIRELESS SENSOR NETWORK NODE	Completed 13.9.2021
7.	G. JHANSI	FISH DISEASE IDENTIFICATION USING ARTIFICIAL INTELLIGENCE	ONGOING
8.	P. SAIKRISHNA	VEHICULAR TRAFFIC IDENTIFICATION AND MONITORING USING IMAGE PROCESSING	ONGOING
9.	SHAFIYA	IMAGE ENHANCEMENT FOR DUST FOG DETECTION IN COAL MINES BY USING ADVANCED EMBEDDED SYSTEMS	ONGOING
10.	INDIRA PRIYADHARSHINI	HEART DISEASE IDENTIFICATION USING	ONGOING

		ARTIFICIAL INTELLIGENCE	
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### NPTEL lectures completed

Timeline	Name	Course Name	Assignment score out of 100
Feb-Mar 2020	Dr. K. SUJATHA	Bioenergetics of Life Processes	67
Jan-Feb 2020	Dr. K. SUJATHA	A brief introduction of Micro - Sensors	79

### Awards/Recognition

S.No	Awards/Recognition	Agency	Faculty Name
1.	<b>Young Researcher Award</b> (2015)	International Symposium on Green Manufacturing and Applications held at Qingdao, China in the year 2015.	Dr. K. Sujatha
2.	<b>Session Chair for International conference</b>	<b>International Symposium on Green Manufacturing and Applications held at Qingdao, China in the year 2015.</b>	
3.	Reviewer for ISA Transactions since 2011	Elsevier	
4.	Award Certificate 2019	National Exhibition of Inventions, CHINA	
5.	Excellence in Education (2020)	Institute of Scientific and Technical Research	
6.	Judge for project competition, "Young Scientist India"	Space Kidz India, Chennai, January 2018.	
7.	Session chair	International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing: EECCMC-2018), 28th January 2018, Priyadarshini college of Engineering.	
8.	Reviewer - Int. Journal of Precision Engg, from 2015 to till date	Springer Publisher	Dr. K. Sujatha
9.	Reviewer – Materials Today Proceedings from 2021 to till date	Elsevier	
10.	Reviewer - International	K.S. Rangasamy College of	

	Conference on Artificial Intelligence and Machine Learning Applications - 2022	Technology, Tiruchengode - 637215, INDIA, AICTE SPONSORED	
11.	International Travel Support Scheme - International conference on Defence and Security Technology (DSTC 2014)	Science and Engineering Research Board	Dr. K.Sujatha
12.	Resource person for NATIONAL SEMINAR ON CONTROL STRATEGY PREDICTION BETWEEN CONVENTIONAL AND INTELLIGENT CONTROLLER, SERB sponsored Seminar, 2018.	Science and Engineering Research Board	
13.	Program Committee Member	International Conference on Recent Trends in Communication & Intelligent Systems (ICRTCIS 2019) on June 8th -9th, 2019 at Arya College of Engineering & IT, Jaipur, Rajasthan, India. Jointly organised by RTU Kota and Arya College of Engineering & IT	Dr. K. Sujatha
14.	Judge for paper presentation , 2019	Saveetha University, 2019. Chrysalis 2019, student's Symposium at Vel's University	
15.	Reviewer	International Conference on Sensor Networks and Signal Processing, June 2018.	Dr. K. Sujatha
16.	Reviewer for The 4th International Conference on Fuzzy Systems and Data Mining (FSDM 2018).	The 4th International Conference on Fuzzy Systems and Data Mining (FSDM 2018).	Dr. K. Sujatha

S.No	Awards/Recognition	Agency	Faculty Name
1.	Reviewer for ISA Transactions since 2017 to till date	Elsevier Publishers	Dr. K.Sujatha
2.	Reviewer for ICRTCIS 2019	International conference	

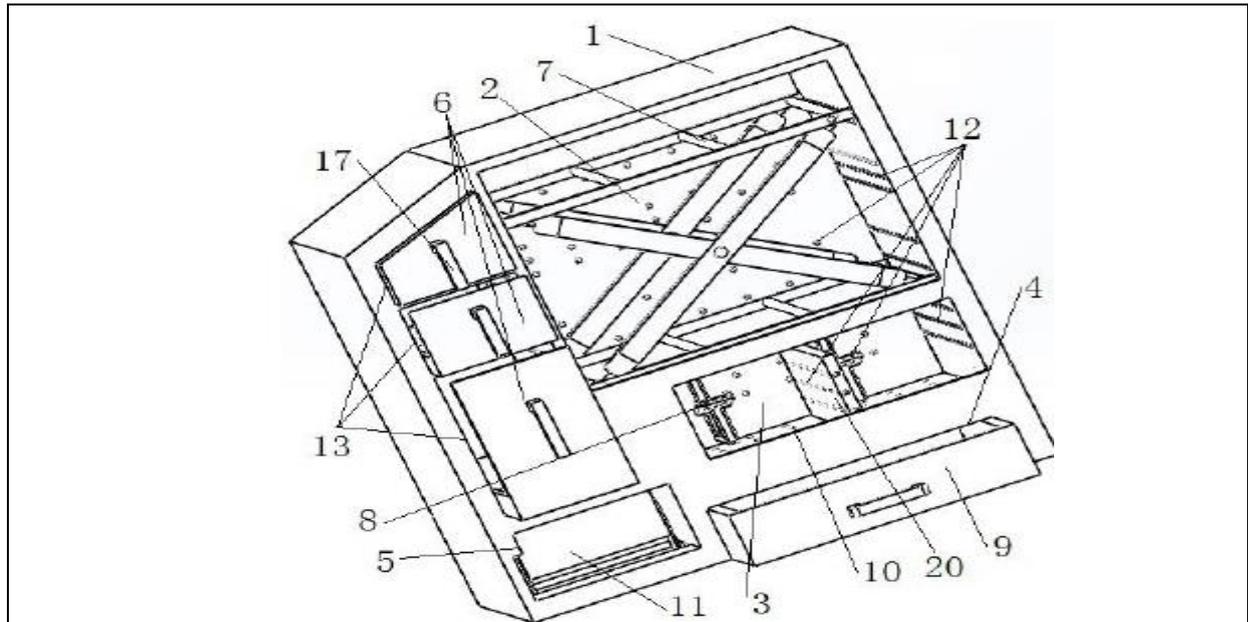
3.	Session chair - International conference on New Achievements in Multidisciplinary Research	Institute for Engineering Research and Publication 27.9.2019	
4.	Award Certificate 2019	National Exhibition of Inventions at China.	
5.	Session chair- National conference on Advancements in Microwave Engineering	SERB-DST at SV Engineering College for Women, Tirupati. 25.01.2019	
6.	Judge for Paper Presentation at Student's Symposium- Chrysalis' 19	Vel's University, Chennai, 4.10.2019	
7.	Excellence in Education (2020)	Institute of Scientific and Technical Research, Jaipur	
8.	Session chair-Intelligent Systems and Robotics	Congress on Intelligent Systems 6-9-2020, India	
9.	Session chair – International Web conference on Smart Engineering Technologies	AI for Automation Ramco Institute of Technology, Rajayapalam, Chennai – 27.6.2020	
10.	National Technical Advisory Committee	International conference on novelty in Applied Science, Engineering and Technology-28.3.2020	Dr. K. Sujatha
11.	Session chair - International conference on Computing, Communication and Control	Sri Sairam College of Engineering 28 <sup>th</sup> , February 2020.	
12.	Member Advisory Board	YUVA Innovators Challenge –KITES 2021	Dr. K. Sujatha
13.	Certificate of Appreciation	Technical Program Committee – International conference on Frontiers of Intelligent Computing: Theory and Applications 25 <sup>th</sup> -26 <sup>th</sup> June 2021	
14.	Program Committee Member and Reviewer	International conference on Data Science and Applications, 10 <sup>th</sup> -11 <sup>th</sup> April 2021	
15.	Session chair – IoT Applications	International conference on communication and computational Technologies, 27 <sup>th</sup> -28 <sup>th</sup> February 2021.	
16.	Keynote Speaker-Real time Applications of Artificial Intelligence	International conference on Artificial Intelligence and Energy Systems, 12 <sup>th</sup> - 13 <sup>th</sup> June, 2021.	
17.	Program Committee Member and Reviewer	International conference on Computer vision and Robotics, 21 <sup>st</sup> -22 <sup>nd</sup> May, 2022	Dr. K. Sujatha
18.	Program Committee Member and Reviewer	IEEE World conferece on Applied Intelligence and Computing, 17 <sup>th</sup> -19 <sup>th</sup> June 2022.	
19.	Keynote Address - Applications of AI	International conference on Emerging Techniques in Electronics,	

		Communication and Computational Intelligence, ECE Dept., Sri Venkateswara College of Engineering, 13.5. 2022	
20.	Excellence in Education	Lion's Club, Chennai on 1.10.22	
21.	Reviewer - International Conference on Artificial Intelligence and Machine Learning Applications - 2022	K.S. Rangasamy College of Technology, Tiruchengode -637215, INDIA, AICTE SPONSORED	
22.	Reviewer - Int. Journal of Precision Engg, from 2015 to till date	Springer Publisher	
23.	Reviewer – Materials Today Proceedings from 2021 to till date	Elsevier	
24.	Adaptability of Artificial Intelligence in Education - <b>5.1.2022</b>	ICSSR sponsored National seminar on AI based AR/VR technologies in Education – A new paradigm for sustainable development – Rajalakshmi Institute of Technology	
25.	Reviewer - December 16 19 <sup>th</sup> , 2022, Zhangjiajie, China	The 3rd International conference on Computer, Big Data and Artificial Intelligence –IOP publishers	Dr. K. Sujatha
26.	Reviewer for project proposal, 2023.	Science and Engineering Research Board, Government of India	
27.	Program Committee Member, 2023.	International Conference on Advances in data driven computing and Intelligent systems, BITS Pilani, India	

### **Innovation on Product Development**

#### **Abstract of Inventions - Vehicular Intelligent Drying Box for Moisture Items**

This invention discloses a vehicle mounted swimming object drying box, one side end face of the box body is successively provided with a drying groove, a drying shoe groove and a drying groove from top to bottom, and also is provided with a drying groove and a drying machine groove, the drying machine is fixed in the drying machine groove, the side wall and the top of the drying groove, the side wall and the top of the drying shoe groove, the side wall and the top of the drying object groove are respectively provided with a drying hole communicated with the drying machine, and the drying groove The lower edge of the groove is higher than the bottom of the drying groove, and the lower edge of the groove is higher than the bottom of the drying groove. It can be seen from the above structure that the vehicle mounted swimming object drying box of the invention is not only convenient to collect and place the clothes needed for swimming or diving in the vehicle, thus reducing the space occupied by the clothes needed for swimming or diving in the vehicle trunk, improving the utilization rate of the vehicle trunk, but also can use the time of the vehicle return to advance the clothes and equipment used for swimming or diving. Drying saves time.



S. No.	Name of the Patenter	Patent Number/ Application number	Title of the patent	Year of Award of patent
1.	K. Sujatha	378574001	IoT based Wearable health monitoring device	Granted in 2023
2.	K. Sujatha T. Godhavari	5582/CHE/2015 404515	A Prepaid Smart Meter System For Power Consumption And Monitoring	Granted in 2022
3.	K. Sujatha	364203001	Robot for Sanitization	Granted in 2022
4.	Dr. K. Sujatha Nallamilli.P.G Bhavani	E-12/861/2017- CHE 201641039202	Intelligent flame monitoring in power station using internet of things	Published in 2019 Under Examination Reply filed
5.	Dr. K. Sujatha V. Srividhya	E-2/3157/2017- CHE E-2/1286/2017- CHE	Artificial intelligence for evaluation of quality in fruits ripening	Published in 2019

		201741037959		
6.	K. Sujatha	201841001276	A STUDY OF MTT ASSAY ON FIBROBLASTS CELL LINE L929 AND	Publication Date :11-01-2019 Under Examination

### PATENTS

### Sponsored Training Events Organized

S.No	Year of sanction	Name of the Funding Agency and Scheme	Title of the Event/Project	Name of the Coordinator/ Investigator	Amount (Rs).	Sanctioned Date
1.	2020	SHORT TERM TRAINING PROGRAMME by AICTE - Ref . N o. 34-.66 / 188 / FDCISTTP/Policy I / 2019-20	STTP on Applied Soft Computing and Vision Machine Techniques	Dr. K.Sujatha	4,31,667/-	12.10.2020
2.	2023	SERB - Sanction Order : SSY/2023/000359	Artificial Intelligence and IoT Applications in Health care	Dr. K.Sujatha	1,50,000/-	10.6.2023
3.	2024	NMICPS Technology Innovation Hub on Autonomous Navigation Foundation Indian Institute of Technology Hyderabad - TiHAN-IITH/1 2 12023-24 I	Skill Development Program - "Emerging trends in Autonomous Navigation"	Dr. K.Sujatha	80,000/-	7.10.2023

4.	2025	SERB - Sanction Order : SSY/2024/002342	National Level Symposium on Smart Agriculture	Dr. K.Sujatha	1,50,000/-	24.1.2025
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### Training and Events Attended

S.No	Event/Activity	Date	Title of the Event/activities
1.	2021	25 <sup>th</sup> -29 <sup>th</sup> May	Basics to Proficiency Level – Hands on Approach on Innovative GIS Technics
2.	2020	10 - 14 April	AICTE sponsored STTP on “IOT (INTERNET OF THINGS)”
3.	2020	13.7.2020 – 18.7.2020	AICTE sponsored STTP on “ Recent trends and challenges of INTERNET OF THINGS in Automation”
4.	2020	25.6.2020- 29.6.2020	VLSI and Embedded System
5.	2019	21th December	Seminar on Block Chain technology, IITM, KYB, Kerala, on
6.	2018-2019	27 <sup>th</sup> Dec – 3 <sup>rd</sup> Jan	One week training program at CMRL
7.	2017	20-11-17 to 25-11-17	One week FDP on “Enhancing Laboratory Skills” at Dr. M.G.R. Educational & Research institute
8.	2017	September 2017	National Seminar on Solar PV power plant – The need of the Day, SKR Engineering College,.
9.	2017	June 2017	Two days workshop on “ <b>Fundamentals of 6LowPAN</b> ” at MIT, Anna University
10.	2016	March 2016.	Engineering Education and Research Seminar by National Instruments,
11.	2016	Jan 2016	“ <b>Internet of Things</b> ” at Dr.MGR Educational & Research Institute
12.	2018	14th and 15th September 2018	IITM's HTIC MedTech Incubator - two Days FDP at HTIC at IITM Research Park, Chennai.

1. One week FDP on “Enhancing Laboratory Skills” from 20-11-17 to 25-11-17 at Dr. M.G.R. Educational & Research institute
2. Two days workshop on “**Fundamentals of 6LowPAN**” at MIT, Anna University in June 2017.
3. One day workshop on “**Research Challenges in IoT**” at MIT, Anna University in Jan 2017.

4. Five days workshop on “**Internet of Things**” at Dr.MGR Educational & Research Institute in Jan 2016.
5. One day workshop on “**SCILAB**” at Aarupadai Veedu Institute of Technology in June 2014.
6. Two days workshop on “ **Advanced Control Systems**” at Sri Ramakrishna Engineering College during October 2013.
7. Five days workshop on “**Mission 10X**” at Dr.M.G.R. Educational and Research Institute, Chennai during April 2012.
8. One day workshop on “**Exploring research areas in harnessing wind energy**” at VIT, Chennai during April 2012.
9. One day workshop on “**Open Modelica**” at MIT, Chennai during March 2012.
10. Two day workshop on “**Research Project Proposal**” at Dr.M.G.R. Educational and Research Institute during July 2010.
11. Two day workshop on “**Machine Vision and Applications of Image Processing using Lab view**” at Easwari Engineering College, Chennai-89, during February 2009.
12. One day workshop on “**Advanced Process Control**” at M.I.T., Chromepet, Chennai, during January 2009.
13. One day workshop on “**Medical Image Analysis**” at R.V.S. Engineering College, Dindigul, during November 2008.
14. Two day workshop on “**Image Processing using Lab view**” at Easwari Engineering College, Chennai-89, during March 2008.
15. STTP on “**Applications of DSP/IP algorithms and VLSI Design**” at Easwari Engineering college, Chennai-89, during June 2007.
16. FDP on “**Fundamental Principles of Psychology & Counseling**”at Sri Sai Ram Engineering College, Chennai, during August 2006.
  
17. FDP on “**Teaching Methodologies**” at Dhanalakshmi College of Engineering, Chennai, during May 2006.
18. One day workshop on “**Teacher as an Invisible Leader**” at Dr.M.G.R. Engineering College, Chennai, during the year 2005.
19. Two day workshop on “**VLSI & Embedded Systems**” at St.Joseph’s Engineering College, Chennai, during September 2004.
20. One day workshop on “**VLSI & Embedded System Tools – VEST**” at Anna University, Chennai, during 2004.

### **SPECIAL LECTURES DELIVERED**

0. Judge for paper presentation at Saveetha University, 2019.
1. Judge for paper presentation at Chyrnalis 2019, student’s Symposium at Vel’s University.
2. Judge for project competition, "Young Scientist India", Space Kidz India, Chennai, January 2018.
3. Session chair, International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing: EECCMC-2018), 28<sup>th</sup> January 2018, Priyadarshini college of Engineering.
4. Lecture on “**Image Processing for Process Control Applications**”, at International Conference on Electrical, Electronics, Computers, Communication, Mechanical and Computing: EECCMC-2018), at Priyadarshini Engineering College, January 2018.

5. Lecture on “**Applications of ANN in Renewable Energy Technology – An Innovation in Learning Practice**”, at Vels University, December 2017
6. Lecture on “**Adaptive Control System**”, at Vel’s University, May 2017.
7. Guest Lecture on “**Control and Automation of Power Plant**” at Adayalampattu Campus, September 2016.
8. Guest Lecture on “**Power Plant Automation**” at Adayalampattu Campus, August 2017.
9. Interdisciplinary Talk on “ Image Processing Applications in Medical Field” at Maduravoyal Campus, August 2017.
10. Reviewer for **Int. Journal of Precision Engg, Springer** from 2015 to till date.
11. Lecture on “**Automation of Power station boilers**”, Workshop on Industrial Automation at SRM University, August 2016.
12. 3rd IEEE International Conference on Electrical, Computer and Electronics-Technical Program Committee- International conference organized by IIT, Bhuvanesar, December 2016.
13. Lecture on “**Artificial Intelligence**” at Rajalakshmi Institute of Technology on December 2015.
14. **Reviewer for ISA transactions, Elsevier Publishers** from 2011 to till date
15. **Chair for International Symposium on Green Manufacturing and Applications held at Qingdao, China in the year 2015.**
16. **Chair for International conference on Information, Telecommunication and Computing held at Chennai, India, 2015.**
17. “**Chair for National Conference on process automation, Image processing and Robotics**”, at Thangavelu Engg College, Chennai, April 2012.
18. Lecture on “**Introduction to Neural Networks and its Applications**” at Saveetha University in collaboration with IET during March 2011.
19. Lecture on “**Introduction to Neural Networks and Fuzzy logic**” at Dr.M.G.R. Educational and Research Institute in collaboration with IET during August 2010.
20. Lecture on “**Introduction to Neural Networks and Fuzzy logic**” and “**Project Initiatives**” at Panimalar College of Engineering during July 2010.
21. Lecture on “**Introduction to Neural Networks and Fuzzy logic**” at DMI College of Engineering in collaboration with IET during September 2009.
22. Lecture on “**Introduction to Neural Networks and Fuzzy logic**” at DMI College of Engineering in September 2009.
23. Lecture on “**Introduction to Image Processing**” at Easwari Engineering College during March 2008.
24. Lecture on “**Basic Concepts of Image Processing**” at S.K.R. Engineering College during December 2007.
25. Lecture on “**Introduction to Neural Networks**” at Dhanalakshmi College of Engineering during June 2006.
26. Lecture on “**Implementation of ANN using VLSI**” at Dr. M.G.R. Engineering College, during December 2004.

### Consultancy/MoUs/MoAs

S.No	Company/Institution	Duration	Activity
1.	Prof. Su-Qun Cao Dean, Faculty of Electronic Information Engineering	From 2015 to till date (2022)	Research Publications

	Huaiyin Institute of Technology, Add: No.1, Meicheng East Road, Huaian City, Jiangsu Prov., China, Postcode: 223003		
2.	Prof. Su-Qun Cao Dean, Faculty of Electronic Information Engineering Huaiyin Institute of Technology, China.	2019	Patents
3.	Prof. Su-Qun Cao Dean, Faculty of Electronic Information Engineering Huaiyin Institute of Technology, China	2020	Collaborative course on Image Signal Processing - MOOCs

### Invited Talks

S.No	Title	Organization	Faculty	Date
1.	Applications of Artificial Intelligence	National Seminar- Emerging Trends and Applications in New technologies, Meenakshi College of Engineering, Chennai	Dr.K.Sujatha	15.9.2023
2.	Adaptability of Artificial Intelligence in Education	ICSSR sponsored National seminar on AI based AR/VR technologies in Education – A new paradiagm for sustainable development – Rajalakshmi Institute of Technology	Dr.K.Sujatha	5.1.2022
3.	Applications of Artificial Intelligence	International conference on Emerging Techniques in Electronics, Communications and	Dr.K.Sujatha	13.05.2022

		Computational Intelligence (ICETECCI-2022) organized by the Department of ECE, SVCE, Tirupati		
4.	Flame Monitoring in Power Station Boilers using Image Processing	International Conference on Advanced Communication Control & Computing Technology (ICACCCT 2022) at Saveetha School of Engineering, Chennai, India.	Dr.K.Sujatha	June 28-30,2022
5.	Real Time Applications of Artificial Intelligence	International Conference on artificial intelligence and energy system (ICAIES-2021) - ITSr		13.6.2021
6.	International Webinar - Flame Monitoring in Power station boilers	Huaiyin Institute of Technology		3.8.2020
7.	Image Processing for Process Control Applications	Priyadarshini Engineering College, January 2018.		5.1.2018
8.	Applications of ANN in Renewable Energy Technology – An Innovation in Learning Practice	Vel’s University		14.12.2017
9.	Automation of Power station boilers”	Workshop on Industrial Automation at SRM University, August 2016		3.8.2016
10.	Invited Talk on “Software Development Process and IT Personnel Training in India” at	Huaiyin Institute of Technology, Jiangsu Province, China.		26.6.2015

11.	Applications of Artificial Intelligence	Faculty Development Program on Empowering Social Life using Artificial Intelligence - International Association for Responsible Artificial Intelligence (IARAI).		21.7.2022
12.	GPS based Road traffic monitoring system	Huaiyin Software Park, Jiangsu Province, China	Dr. K.Sujatha	25.6.2015

### **PERSONAL DETAILS**

- Date of Birth : 23.07.1978
- Nationality : Indian
- Religion : Hindu
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- Children : Two
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### **References**

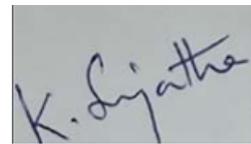
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3. Dr. R.S. Ponmagal,  
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**I hereby declare that the information furnished above is true to the best of my knowledge.**

A rectangular box containing a handwritten signature in black ink that reads "K. Sujatha".

**(Dr. K.SUJATHA)**

**Place: Chennai**

**Date: 03.2.26**