FACULTY PROFILE		
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Anna University Supervisor Recognition No.		4140038
Designation	:	Associate Professor & Head of the Department
Qualification	:	M.E., Ph.D.
Teaching Experience	:	27 years and 4 months
Area of Specialization	:	Signal Processing and Image Processing
Subjects Handled	:	Discrete Time Signal Processing Electron Devices and Circuits Digital Principles and system Design Wireless Sensor Networks Electronics and Microprocessor Electronic circuits Embedded System Design HW & SW Co design
Books Published	:	Published on **"Internet of Things – A hands on Approach ",** Scientific International Publishing House (SIPH), 2023
Journals Published	:	

P Nagarajan, S Manoharadas, V Dhasarathan, **S Rajeshkannan, "Cancer Detection Using Multi-layered Kretschmann Configuration–based Refractive Index Sensor", Plasmonics, 1-12, 2024 (Q3)**

D Beaulah Princiba, P Ezhilarasi, **S Rajeshkannan, "CSMEC-based deep learning model for detection and classification of brain tumours in MR images Neural Computing and Applications", Neural Computing and Applications,36 (29), 18479-18498, 2024 (Q1)**

KM Alaaudeen, S Manoharadas, V Dhasarathan, **S Rajeshkannan, " Design and Modelling of Surface Plasmon Resonance Biosensor Employing BaTiO$_3$ and Graphene Nanostructure for Detection of SARS-CoV-2 Virus", Plasmonics, 1-11 2024 (Q3)**

J. Pearline Sheba P. Ezhilarasi **S. Rajesh Kannan, " Unveiling the Secrets of Brain Tumors: A Fuzzy C-Means and U-Net Convolution Approach for Enhanced Segmentation", International Journal of Computers Communications & Control, Vol. 19, No. 2 , 2024 (Q3)**

PS Kumar, S Prabagaran, SR Kandavalli, **S Rajeshkannan, "Analysis of Sea Urchin Spike Chitin and Basalt Bamboo Fiber-Epoxy Composite for Environmental Sustainability", Waste and Biomass Valorization, 1-15 2024 (Q2)**

S Rajeshkannan, A Sivakumar, M Mariappan, J Gunasekaran, **"Performance Evaluation of PET Foam and Areca Fruit Fibre Reinforced Modified Cellulose-Vinyl Ester Composite on Thermal and Water Ageing Conditions", Waste and Biomass Valorization, 1-15 2024 (Q2)**

S Rajeshkannan, S Annamalai, S Saravanan, L Karthikeyan **"Effect Of Silane Grafted Polyethylene Terephthalate Foam, Areca Fruit Fiber And Microcrystalline Cellulose Toughened Vinyl Ester Composite On Thermal And Water Accelerated Aging", Surface Review and Letters, 2550066 2024 (Q3)**

K Shunmugapriya, SR Kandavalli, **S Rajeshkannan,** VR Lenin **" Load bearing investigations on silane coupling grafted PET core and pineapple leaf fibre-vinyl ester sandwich composite building material", Surface Review and Letters, 1-19 2024 {Q3)**

M.R., Raja, M. Ramkumar, C., Annadurai, Chinnamuthu, S**., Rajeshkannan, S "Synthesizing Carbon Nanodots for Longer Wave Quantum Emission in Biological Applications", ECS Journal of Solid State Science and Technology 13(12) 2024 (Q3)**

A Saravanan, P Thirumurugan, **S Rajeshkannan,** S Sridha,r **"Effect of corn cob carbon quantum dots and areca husk microfiber on EMI shielding effectiveness of flexible PVA thin film at 8–20GHz frequency bands", Biomass Conversion and Biorefinery 14 (16), 18827-18834, 2024 (Q2)**

D Surrya Prakash, V Rajangam, J Joseph, **S Rajeshkannan**, E Shankar **" Synthesized Nanoaluminum Oxide with Al2024 to Investigate Wear Behavior by Grey Relational Approach and ANN", Journal of Nanomaterials 2023 (1), 9788451 , 2023 (Q3)**

NS Vadivu, Y Trabelsi, JR Jayasingh, **S Rajeshkannan,** MH Sani **"A novel design of all logic gates in honeycomb photonic crystal and independent of**

| | | polarization modes (TE/TM) for optical integrated circuit applications", Optics and Lasers in Engineering 161, 107345, 2023 (Q1)

G Murugesan, J Jeyapriya, M Hemalatha, **S Rajesh kannan** , "**Faster Region based convolution neural network for skin lesion segmentation**", **Intelligent Automation in soft computing, 36 (2) , 2023 (Q4)**

S Rajeshkannan. J.Sivakumar, P.Ezhilarasi, "**Automatic detection of COVID-19 in chest radiographs using serially concatenated deep and handcrafted features**," **Journal of X-ray Science and technology, vol. 30, no. 2, pp. 231-244, 2022, DOI : 10:3233/XST-211050 (Q2)**

K. K. Arun, **S.Rajeshkannan,** P. Ezhilarasi, L. Natrayan, "**A preliminary study on the reactive suspension approach to create bioactive polymer nanocomposites for dental applications**', **Digest Journal of Nanomaterials and Biostructures Vol. 17, No. 3, , pp. 931 – 939, 2022, DOI: 10.15251/DJNB.2022.173.931** (Q4)

S Rajeshkannan, B Vasudevan, , J Siva Kumar**, " An adaptive chromosome based cost aggregation approach for developing a high quality stereo vision model", Journal of Electrical Engineering, 21(1),pp.11, 2021.**

RP A.Christy Precilla, Joselin George**, S.Rajesh Kannan, "Modified PCA based image fusion using feature matching", International Journal of Pure and Applied Mathematics, 119 (15), 477-483, 2018**

S Rajeshkannan, Reeba Korah, "**A Combined Approach for Stereoscopic 3D Reconstruction Model based on Improved Semi Global Matching**", **International Arab Journal of Information Technology (IAJIT),13 (5), 2016 (Q2)**

S Rajeshkannan, Reeba Korah, "**Improved CRC Based Disparity Estimation of Vision System Using Local Adaptive Hue Census and Mean Shift Clustering**" **National Academy Science Letters 39 (1), 35-38, 2016** (Q3)

S Rajeshkannan, Reeba Korah, "**Improved Stereo Matching algorithm using contrast limited adaptive histogram equalization**" **International Review on Computers and Software, vol. 8, no. 7, pp.1549-1555, 2013** |

Conference /Workshop Attended	:	1. Angelin Ponrani, M., Ezhilarasi, P, **Rajeshkannan S**, **"Modelling of Intelligence Stereoscopic Vision System Using Adaptive Super-Pixel Based Disparity Estimation Algorithm, International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence, RAEEUCCI , 2024**
		2. L Venkatraman, S Niksheetha, P Ezhilarasi, **S Rajeshkannan "Cipher Care: Multi-Authentication Video Steganography powered "**, *IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS), 2024*
		3. S. M. Ramesh, **S. Rajeshkannan**, S. Pundir, N. Dhaliwal, S. Mishra and B. S. Saravana, **"Design and Development of Embedded Controller with Wireless Sensor for Power Monitoring through Smart Interface Design Models,"** *2023 Second International Conference on Augmented Intelligence and Sustainable Systems (ICAISS)*, **pp. 1817-1821, 2023, doi: 10.1109/ICAISS58487.2023.10250506.**
		4. **S Rajesh Kannan,** VG Rajagopalan, H Ramakrishnan, S Sibi Selvan, Sushanth Krishnamithran, **"Design and Implementation of efficient IoT based Smart Oil Skimmer", Smart Sensors Measurement and Instrumentation, pp. 393-409, Springer Nature, 2023**
		5. **Rajesh Kannan S**; Ezhilarasi P; Rajagopalan VG; Sushanth Krishnamithran; Ramakrishnan H; Harish Kumar Balaji, **"Integrated AI Based Smart Wearable Assistive Device for Visually and Hearing-Impaired People,"** *International Conference on Recent Trends in Electronics and Communication (ICRTEC)*, **pp. 1-6, 2023 doi: 10.1109/ICRTEC56977.2023.10111863.**
		6. G.Shahana P. Ezhilarasi, **S. Rajeshkannan**, **"Adaptive Neuro Fuzzy Data Aggregation Model for Developing and Planning for Aquaculture Farming Practices,"** *International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI)*, **Chennai, India, 2023, pp. 1-8, doi: 10.1109/ACCAI58221.2023.10200854**
		7. **Rajeshkannan S**, Ezhilarasi P , **"Efficient Cloud based Automated Brain Segmentation using 3D Printing Application", Stochastic Modeling & Applications, vol.26, no.3, pp . 1185-1198, 2022.**
		8. Abishk.R, **Rajeshkannan S**, Ezhilarasi P, **"Smart Health Integrated Screening System using smart mirror", Stochastic Modeling & Applications, vol.26, no.3, pp . 1199-1208, 2022.**
		9. S Mishra, **S Rajeshkannan**, N Mohankumar, TRG Babu, **"VLSI based Implementation of Channel oriented ICA Processor for Biomedical systems ", Journal of Physics Conference Series, vol.1964, no.6, article no.062086,2021**
		10. **S Rajeshkannan,** S Mishra, TRG Babu, N Mohankumar, **"Effective Parametric Image Sequencing Technology with Aggregate Space**

Profound Training" Journal of Physics Conference Series, vol.1964, no.6, article no.062070, 2021

11. Aishwarya Priya Pudureddiyur Manivannan, Swetha Nyniappan, **Rajeshkannan S**, Saji Jacob George, Joel Jose and Joseph Winston S, **"Real Time Obstacle Proximity Warning Through Human Machine Interface and Quadrature Interpretation of a Two   Axis Robotic Inspection System", Advanced Manufacturing Systems and Innovative Product Design. Lecture Notes in Mechanical Engineering. Springer 2021**

12. Shruthi S, Priya Dharshini, Ranjith Raj B, Vaddi Lakshmi Satya S Sai Sarojini, Ezhilarasi P**, Rajesh Kannan S "Anxiety Controlling Wrist Band" Advances in Parallel computing, IOS Publisher, Vol. 38, PP. 145- 154, 2021**

13. G.Shahana P. Ezhilarasi, **S. Rajeshkannan**, **"Comparison of Mamdani and Sugeno fuzzy based data aggregation models for developing smart aquaculture system", Second International Conference on Innovative Computing, Intelligent Communication and Smart Electrical systems (ICSES -2022), ICSES 393, 2021**.

14. Ezhilarasi.P**, Rajeshkannan S**, & Gokula Prasath P**, "Smart Health Monitoring System",Journal of Computational and Theoretical Nanoscience, Vol 17, Number 5 pp 2261-2265 (5), 2020.** (DOI: **https://doi.org/10.1166/jctn.2020.8881)**

15. P. Ezhilarasi, **S. Rajeshkannan**, Kovendan. A K P, T. Sasilatha, K. R. Kayalvizhi, **"Damaged Number Plate Recognition", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9, Issue-1S2, pp 22-25, 2019. (DOI: 10.35940/ijeatA1018.1291S219)**

| **Patent Details** | : | Total Number of Patents (IPR) Published : **05** |

Patent Details : Total Number of Patents (IPR) Published : **05**

S.No	PatentTitle	Name of Applicant(s)	Status
1	Design A Low-Cost Green Power Divining Farming Using IoT and Cloud Computing	**Dr. S.Rajeshkannan** Dr. P.Ezhilarasi Dr. J. Sivakumar	Published
2	Development of Next Generation Eco Air Purifier Device with Intelligent Air Quality Monitoring and Disruptive Module	**Dr. S.Rajeshkannan** Dr. P.Ezhilarasi Dr. J. Sivakumar Dr. B. Vasudevan	Published
3	Smart Mobile Phone Deposit Machine using IoT& Artificial Intelligence Techniques.	**Dr. S.Rajeshkannan** Dr.P.Ezhilarasi Dr.A.Balamurugan Dr.B.Vasudevan	Published & Applied for Grant
4	Cost-Effective Multi-Purpose AI Based Drone Using Smartphone	Mr.Harish Kumar Mr.Akash M. B Dr.P.Ezhilarasi **Dr. S.Rajeshkannan**	Published
5	Micro Level Power Management System	Dr. S. Rajeshkannan M.B. Akash Jasper Joshua Dr. P. Ezhilarasi	Published & Applied for Grant

Funded Project Details

Name of the Funding Event	Funding Agency	Amount Received (in Rs.)
MSME Idea Development Grant	MSME-Government of India	34,00,000/-
IIC-MIC Product Development Grant	AICTE&Ministry of Innovation Cell	3,00,000/-
PoC Development Fund- Swedesi Microprocessor Challenge	AICTE & IITM	1,00,000/-
Prototype \Development Fund **TNSI 2021**	EDII – TN Tamilnadu Government	1,00,000/-
AT & Robotics Project Development Fund 2021	IISc Bangalore Minigrant	4,00,000
Prototype Development Fund **TNSI 2020**	EDII – TN Tamilnadu Government	1,00,000/-
Project Development Fund 2019 & 2021	TNSCST (Tamilnadu State Council for Science and Technology)	15,000

Consultancy

Title	Faculty Involved	Name of the Company	Duration	Amount

		Autonomous Robot Design with Sworm Operation Design SDK (Standard Developing Kit) GUI development for system controlling, Firmware development for Eye ball movement	**Dr.S. Rajeshkanna** **Dr. P. Ezhilarasi**	Pantech Pro Labs Pvt. Ltd., Chennai	2019	Rs. 1,00,000	
Reviewer		Concurrent Engineering - SAGE National Academy Science Letter - Springer Biomedical Signal Processing & Control - Elsevier Neural Processing Letters, Springer Nature Journal of X-Ray Science and Technology, SAGE American Journal of Science, Engineering and Technology, SciencePG Advances in Science, Technology and Engineering Systems Journal (ASTESJ) , Medicon - Open access					
Editor		Medical Imaging Process & Technology, Enpress - Section Editor IIP Series - Book Series Chapter - Editor					