

<p>Name: R.KARTHIKEYAN karthikeyan.ei@sairam.edu.in</p>		
<p>Designation</p>	<p>Associate Professor</p>	
<p>Qualification</p>	<p>DIPLOMA</p>	<p>D. E. E. (1991)</p>
	<p>UG</p>	<p>B. Tech. (Instrumentation) (2003)</p>
	<p>PG</p>	<p>M.E., (Electronics & Control) (2007)</p>
	<p>Ph.D.</p>	<p>Pursuing (Reinforcement Learning)</p>
<p>Area of Specialization</p>	<p>Machine Learning, Reinforcement Learning, Q-Learning, Autonomous Navigation of Robots, Control System, Process control, Power Plant Instrumentation</p>	
<p>Experience</p>	<p>Teaching- 15 Years</p>	<p>Industry: 20 Years</p>
<p>Number of Workshops/ Conferences/ FDP Attended</p>	<p>FDP</p>	<p>20</p>
	<p>Workshops</p>	<p>10</p>
	<p>Conferences</p>	<p>11</p>
<p>Publication</p>	<p>International Journal</p>	<p>12</p>
	<p>National Journal</p>	<p>03</p>
	<p>International. Conf.</p>	<p>09</p>
	<p>National Conference:</p>	<p>02</p>
	<p>Books</p>	<p>02</p>
<p>Membership</p>	<p>IEEE, ISTE</p>	
<p>Research Guidance:</p>	<p>UG Projects – 25</p>	<p>PG Projects- 06</p>
<p>Patent Granted / Published</p>	<p>01 / 06</p>	
<p>Staff Achievement</p>	<p>Best Engineer – India Innovation challenge 2018- DST-TI</p>	

Experience:**Teaching Experience: (18.6 years)**

S. No	Name of the Institution	Designation	Department	Period of Experience
1	Sri Sairam Engineering College, Chennai	Associate Professor	Electronics and instrumentation Engg (2025 –July)	3.6 year
2	Sri Sairam Engineering College, Chennai	Assistant Professor / Grade II	Instrumentation and Control Engineering	11 years
3	Madha Engineering College	Assistant Professor	Electronics and Instrumentation	1 year
4	Sathyabama University	Assistant Professor	Electronics and Instrumentation	4.6 years

Industry Experience: (14.6 years)

S.No	Company	Designation	Area of Working	Period of Working
1.	Madras Fertilizers Ltd	Technical Assistant	Maintenance	Nov 1994 - June 2006
2.	North Madras Thermal Power Project	Technical Assistant	Erection and commissioning	Dec 1991 - Nov-1994

PATENTS

1. PORTABLE MILL WRIGHT FITTERS :
Filed 2019-12-06
Published 2019-12-13
2. SELF SUSTAINABLE INDOOR PLANT POT WITH INDICATOR
Filed 2020-01-06
Published 2020-01-17
3. METHOD FOR PREPARING ALOE FEROX BANANA FIBER COMPOSITE
4. HYBRID TRICYCLE WITH TO AND FRO ACTION OF STEERING MECHANISM
5. A DISPENSING DEVICE TO SURGE PROXIMITY USER INTERFACE
6. A KEVLAR FIBRE REINFORCED COMPOSITE

BOOKS

Data Science and Machine Learning

R Karthikeyan

Data Science and Machine Learning, **Year** 2024

Machine Learning Algorithms

Dr E Priya, Ms T Mangayarkarasi, Ms C N Savithri Mr R karthikeyan

Machine Learning Algorithms, **Year** 2023

PUBLICATIONS

1. An innovative approach for obstacle avoidance and path planning of mobile robot using adaptive deep reinforcement learning for indoor environment Karthikeyan, R. Sep 27, 2025 |Knowledge-Based Systems
2. Improving Medical Imaging Diagnostics by Utilizing Compression Techniques and Implementing FPGA Acceleration with Vivado HLS, Karthikeyan.R, Dr.Hariharan Illango, Rajakumar. Dr. SumathiSokkanarayanan, Chithrakkannan.R, International Journal ofINTELLIGENT SYSTEMS AND APPLICATIONS IN, ENGINEERING, Volume 12(21s), Year 2024, Pages 1457–1463
3. Monitoring and alerting system for reservoirs and dams using embedded system, Jaiganesh, J. , Karthikeyan, R. , Krishnamoorthy, N.R. , Ramadevi, R. , Rajalakshmi, G, AIP Conference Proceedings, Volume 2937, Year 2024
4. Pattern Knowledge Discovery Based Lung Cancer Classification System, R. Karthikeyan: T. Mangayarkarasi, R. Chithrakkannan, Cardiometry, Volume 26, Year 2023, Pages 623-628
5. Low Cost Assorted Sized Bottles Automated Liquid Filling System using SCADA, Gowriswari, S. , Karthikeyan, R. , Brindha, S. , Karthick Kumar, S. 2023 Intelligent Computing and Control for Engineering and Business Systems, ICCEBS 2023, Year 2023
6. Modeling & Analysis Of Boiler Drum Control System Using Petri Nets, R.Chithrakkannan; T.Mangayarkarsi; R.Karthikeyan Elementary Education Online, Volume Vol 19 (Issue 4);, Year 2020, Pages 6780-6787
7. Implementation of GUI for class attendance using face detection and recognition system Karthikeyan R.;Nalinashini G.;Chithrakkannan R.;Mohanraj K.;Uma Maheswari B. International Journal of Innovative Technology and Exploring Engineering, Volume 9, Year 2019, Pages 2993-2996
8. Breast Cancer Detection using Machine Learning, R.Karthikeyan, International Journal of Innovative Technology and Exploring Engineering, Volume 8-11, Year 2019

9. Detection of volatile organic compound using electrochemical sensor, Uma Maheswari B.;Mangayarkarasi T.;Jayanthi G.;Karthick L.;Karthikeyan R. [Article](#) International Journal of Recent Technology and Engineering, Volume 8, Year 2019, Pages 4633-4637
10. Smart warehouse monitoring using IoT, Mohanraj K.;Vijayalakshmi S.;Balaji N.;Chithrakkannan R.;Karthikeyan R. International Journal of Engineering and Advanced Technology, Volume 8, Year 2019, Pages 3597-3600
11. Detecting the Lost Flight and Determination of Its Location In Sea Using Buoys R.Karthikeyan, International Journal of Pharmacy & Technology , Year 2017
12. Design and development of automated irrigation system, Thaj Mary Delsy T.;Karthikeyan R.;Gopi Krishna Rao P. International Journal of Pharmacy Technology and, Volume 7, Year 2015, Pages 8211-8220
13. Elimination of slave controller in cascade level-flow process control system using back propagation neural network, Kalaiselvi B.;Kumar K.H.;Karthikeyan R. Proceeding of the IEEE International Conference on Green Computing, Communication and Electrical Engineering, ICGCCEE 2014, Year 2014
14. Impact of intelligent controller in a multiprocess system using artificial neural network - BPN
15. Kalaiselvi B.;Karthikeyan R. Proceeding of the IEEE International Conference on Green Computing, Communication and Electrical Engineering, ICGCCEE 2014, Year 2014
16. An instant path planning algorithm for indoor mobile robots using adaptive dynamic programming and reinforcement learning Karthikeyan R.;SheelaRani B.;Renganathan K. International Journal of Engineering and Technology, Volume 6, Year 2014, Pages 1224-1231
17. Obstacle detection techniques for vision based autonomous navigation systems Karthikeyan, R.;Sheela Rani, B.;Renganathan, K, Lecture Notes in Electrical Engineering, Volume 188 LNEE, Year 2013, Pages 43-52
18. An Image Segmentation Technique and B'iezer Curve Smoothing for Differential Drive Robot Navigation R.Karthikeyan, International Journal of Information Science and Intelligent System, Year 2013
19. A Multi Image Segmentation Technique for Robot Navigation and Curve approximation in Path Planning R.Karthikeyan, ISOI, Year 2013

20. Fault Detection of Vision Based Robot Using Generalized Stochastic Petri Net in Dynamic Obstacle Avoidance R. Karthikeyan, B. Sheela Rani and K. Renganathan IX Control Instrumentation System Conference (CISCON - 2012), Year 2012
21. Study of Fault Detection for Vision Based Robot Using Petri Net In Dynamic Obstacle Avoidance R.Karthikeyan International Journal of Engineering Research & Technology , Year 2012