

Name: R.KARTHIKEYAN		
Designation	Associate Professor- Silver	
Qualification	DIPLOMA	D. E. E. (1991)
	UG	B. Tech. (Instrumentation) (2003)
	PG	M.E., (Electronics & Control) 2007
	Ph.D.	Pursuing (Reinforcement Learning)
Area of Specialization	Machine Learning, Reinforcement Learning, Q-Learning, Autonomous Navigation of Robots, Control System, Process control, Power Plant Instrumentation	
Experience	Teaching- 20 Years	Industry: 14.6 Years
Number of Workshops/ Conferences/ FDP Attended	FDP	20
	Workshops	10
	Conferences	11
Publication	International Journal	12
	National Journal	03
	International. Conf.	09
	National Conference:	02
	Books	02
Membership		IEEE, ISTE
Research Guidance:	UG Projects – 25	PG Projects- 06
Patent Granted / Published	01 / 07	
Staff Achievement	Best Engineer – India Innovation challenge 2018- DST-TI	

Experience:

Teaching Experience: (20 years)

S. No	Name of the Institution	Designation	Department	Period of Experience
1	Sri Sairam Engineering College, Chennai	Associate Professor	Artificial Intelligence and Data Science	2 years
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**