


FACULTY PROFILE

Name of Teaching Staff / RMK ID	Dr.D.Abitha kumari			
Designation	Professor			
Department	IT			
Date of Joining the Institution	01.07.2022			
Qualifications	B.E.	M.E.	Ph.D.	
Total Experience	Overall : 19.3		in RMK : 3.6	
Papers Published in Journal	Overall : 21		After Joining RMK :10	
List of Papers Published	<p>1. Abitha Kumari D, Lakshmi R, Reshma B, Rithika A R K, “AI-Driven Hive Management: Optimizing and Enhancing Honey Production through AI and Sensor-Based System”, 2nd International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering, RMKMATE 2025.</p> <p>2. M. Saravana Karthikeyan, J., R. Santhana Krishnan , D. Abitha Kumari, Relin Francis Raj, “Towards Safer Digital Spaces: Automated Detection of Cyberbullying Through Multi-Modal Learning”, International Conference on Sustainable Communication Networks and Application (ICSCNA-2024)</p> <p>3. C. Ashokkumar, <u>D. Abitha Kumari</u>, S. Gopikumar, N. Anuradha, <u>R. Santhana Krishnan</u>, I. Sakthidevi, “Urban Traffic Management for Reduced Emissions: AI-based Adaptive Traffic Signal Control”, 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS) August 2024 .</p> <p>4. <u>R. Santhana Krishnan</u>, S. Gopikumar, A. Essaki Muthu, J. Relin Francis Raj, <u>D. Abitha Kumari</u>, P. Stella Rose Malar, “Next-Gen Manhole Monitoring: Autoencoder-Assisted Anomaly Detection”, 3rd International Conference on Applied Artificial Intelligence and Computing (ICAAIC), July 2024 979-8-3503-7519-0/24/\$31.00 ©2024 IEEE DOI: 10.1109/ICAAIC60222.2024.10575872.</p> <p>5. Madhusudhanan Sampath, Abitha Kumari Duraisamy,</p>			

Amalorpava Mary Rajee Samuel and Yamuna Devi Manickam Malu, “**UNMANNED AERIAL VEHICLE PATH PLANNING USING WATER STRIDER ALGORITHM**”, DOI: 10.23055/ijietap.2024.31.3.9861 ISSN 1943-670X © INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING June 2024.

6. D. Abitha Kumari, G. Moneekha, P.B. Nithya Sree, S. Neenasri, “**Digital Farming for Silkworms: A Technological Breakthrough**”, 5th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI) April 2024, DOI: [10.1109/ICMCSI61536.2024.00056](https://doi.org/10.1109/ICMCSI61536.2024.00056).

7. X. Arogya Presskila; D. Abitha Kumari; P. Ebby Darney; S. Sundararajan; C. Ramasamy Sankar Ram, Sangeetha, A. “**Enhancing Campus Safety: A Comprehensive Approach with IoT and OpenCV Technology**”, Proceedings of the 4th International Conference on Smart Electronics and Communication, ICOSEC 2023, October 2023, pp. 456–462, DOI: [10.1109/ICOSEC58147.2023.10275946](https://doi.org/10.1109/ICOSEC58147.2023.10275946).

8. D. Abitha Kumari, “**An Efficient Methodology for Detecting Malicious nodes in Cognitive Radio Networks**”, The Journal of Wireless Personal Communications, July 2023, 131:3089–3099, <https://doi.org/10.1007/s11277-023-10603-0> (SCI)

9. D. Abitha Kumari, S. Rama Lakshmi, R. Revathy, S. Sundararajan, R. Santhana Krishnan “**Automated Process for Retinal Image Segmentation and Classification Via Deep Learning based CNN Model**”, published in IEEE explorer, doi.org/10.1109/ICICT57646.2023.10133943. (Scopus)

10. S.Sridevi, A.Ilavendhan , M. Shyamala Devi , J.Rahila , D.Abitha kumari and B.Pandeeswari “**Interstitial Lung Disease - Case Study**”, published by AIP, September 2022, <https://doi.org/10.1063/5.0104508>. (Scopus)

11. D. Abitha Kumari, R. Raja Guru, M. Mathankumar, A. Manjunathan, 2022 “**Certificateless Linkable Ring Signature-based Blockchains for securing Cognitive Radio Networks**”, Journal of Concurrency and Computation: Practice and Experience, [Impact factor](https://doi.org/10.1002/cpe): 1.831, Volume 34, Issue: 24

[Doi.org/10.1002/cpe.7235](https://doi.org/10.1002/cpe.7235) (SCI)

12. **D. Abitha Kumari** Dr. J Sutha, 2018, “An Efficient Encoder Architecture Design for Cognitive radio Networks”, Journal of Wireless personal Communications, Springer Link Impact factor: 1.20 Volume: 103, Issue: 4, Page: 3181- 3188, DOI: 10.1007/s11277-018-6001-1, DEC 2018. (SCI)
13. Karthiyayini Murugesan & **D. Abitha Kumari**, 2018, “Heterogeneous Ensemble Classifier Model for Early Alzheimer’s Disease Diagnosis”, Asia Pacific Journal of Research, ISSN (Print): 2320- 5504 , Vol: I. Issue LXXXVII.
14. **D.Abitha Kumari** & Dr. J Sutha, 2017, “Performance Analysis of an Efficient Architecture for Interference detector in Cognitive Radio Networks”, Asian Journal of Research in Social Sciences and Humanities 6 (2), 1036-1046. (Indian

Citation Indexed)

15. **D.Abitha Kumari** & Velvizhi Vinodhini, 2017, “Analysis of Energy Efficiency of Adhoc Cognitive Radio Network” International Journal of Innovative Research in Science, Engineering. (Google Scholar Indexed)
16. **D.Abitha Kumari** & J Sutha, 2016, “Low Power Interference Detection and Cancellation Architecture for Cognitive Radio Networks”, International Journal of Printing, Packaging & Allied Sciences 4 (5), 3898-3906.
17. Premalatha & **D.Abithakumari**, 2016, “QoS Enhancement on Meta-Heuristic Optimization of Centralized Scheduling for CRND”, International Journal of Engineering Science and Computing. (Google Scholar Indexed)
18. **D.Abitha Kumari** & N.Rajasekaran, 2015, “An Enhanced Queuing System For Multiple Mobile Elements In Wireless Sensor Networkd”, International Journal of Applied Engineering Research, ISSN 0973-4562 (**Scopus-Indexed**)
19. M.Nandhini, M.Poomani@Punitha & **D.Abitha Kumari**, 2015, “An Optimal Time Interval Selection and Authenticating Primary User Signal for Cognitive Radio System”, International Journal of Applied Engineering Research, ISSN 0973-4562.
20. U. Thuslimbanu, **D.Abitha Kumari**, 2014, “Spectrum Holes Sensing Policy For Cognitive Radio Network Using Reinforcement-Learning”, International Journal of Advanced Research in Computer Science & Technology. (Google Scholar Indexed)
21. IK Leelarani & **D.Abitha Kumari**, 2014, “Efficient Spectrum Sensing Pattern Using Intelligent Matrix in Cognitive Radio Network”, International Journal of Advanced Research in Computer Science & Technology. (Google Scholar Indexed)

Papers Presented in Conferences (Scopus / WoS indexed only)	Overall : 1	After Joining RMK :0
Ph.Ds / Projects Guided	Ph.Ds Guided : Nil	Student Projects Guided :32
Books / Book chapter Published :	Count :2	
	List : <ul style="list-style-type: none"> • R. Santhana Krishnan, Dr.D.Abitha kumari, Ms.A.Sangeetha, published a book chapter on “A Secured Manhole Management System Using IoT and Machine Learning” in Recent Advances in Internet of Things and Machine Learning – Springer. (Scopus-Indexed) • A Peter Soosai Anandaraj, V Gomathy, A Amali Angel Punitha, D Abitha Kumari, S Sheeba Rani, S Sureshkumar, “Internet of Medical Things (IoMT) Enabled Skin Lesion Detection and Classification Using Optimal Segmentation and Restricted Boltzmann Machines”, Cognitive Internet of Medical Things for Smart Healthcare, Springer, Cham, 195-209, 2021. (Scopus-Indexed) 	
Patents	Published Count :2	Granted Count :
	List : <p>Dr.D.Abitha kumari Patent published on “New Method For User Authentication Using Machine Learning Approach“, with Patent number - 202041053092 at 11.12.2020.</p> <p>Dr.D.Abitha kumari Patent published on “IOT Based Design for Brain Tumor Detection and Analysis with Advanced Imaging Techniques on MRI Images”, with Patent number - 202041053804 at 22.01.2021</p>	
Professional Memberships	Count :6	
	List :	

	<ul style="list-style-type: none"> ✓ IJCS Journal – Editorial Board Member, Membership Number: 2022SKRGC1125, SK SKRGC Publication Member, Research Group of Companies (SKRGC) - Scholarly Peer Reviewed Research Journals ✓ Member of the Institute for Engineering Research and Publication from 20.02.2020 to 31.12.2022, Member ID:PM84139562 ✓ Member in IAENG International Association of Engineers. ✓ Member in Internet Society, Member ID:224698 ✓ Member in ISTE ✓ Associate Member in the IRED Institute of Research Engineers and Doctors.
Consultancy Projects Completed	Count :2
Awards Received	Count :4
	List : <ul style="list-style-type: none"> • Recipient of the prize for the best usage of INNOVATIVE TEACHING TOOLS in Sethu Institute of Technology, Pulloor, Kariapatti. • Recipient of the RESULT AWARDS (Cash Awards) for the following subjects Computer Programming, Data Structures, Object Oriented Analysis and System Design, User Interface Design, Adhoc Networks.
Research grants Received	<ul style="list-style-type: none"> • Coordinator for AICTE – SPICES, 2022 project for the development of a model student club of SITWARE Association at Sethu Institute of Technology.
Orcid Link / ID	ID : 0000-0001-6898-3275
Google Scholar Link / ID	ID : 8byy9f4AAAAJ

Vidwan Link / ID	ID : 309953
Research Gate Link / ID	AAY-4518-2020
Scopus Link / ID	ID : 56872862400