

# FACULTY PROFILE

<b>Name of Teaching Staff / RMK ID</b>	B.Sarala			
<b>Designation</b>	Associate Professor			
<b>Department</b>	ECE			
<b>Date of Joining the Institution</b>	01.06.2011			
<b>Qualifications</b>	B.E	M.Tech		PhD
<b>Total Experience</b>	Overall : 21		in RMK : 12	
<b>Papers Published in Journal</b>	Overall : 25		After Joining RMK : 25	
<b>List of Papers Published</b>	<ol style="list-style-type: none"> <li>1. Classical Energy Detection Method For Spectrum Detecting in Cognitive Radio Networks by using robust augmented threshold techniques, B.Sarala, D.Rukmani Devi, D.S. Bargava, cluster computing, Springer - the journal of networks software Tools and applications, Springer, 22,11109-11118 ( Sep 2019) Impact factor -3.458, science citation index, expanded [scvisearh], Scopus, Google scholar, WOS, pp. 1-10. <a href="https://doi.org/10.1007/s10586-017-1311-8">https://doi.org/10.1007/s10586-017-1311-8</a>, volume 22, issue -5, 1.9. 2019., page 11109-11118, cited by 7, ISSN no : 1386-7857</li> <li>2. Spectrum energy detection in cognitive radio networks based on a novel adaptive threshold energy detection method, B.Sarala , S.Rukmani Devi &amp; J.Joselin Jeya Sheela , computer communications, Elsevier, volume 152, 9 Jan 2020, page 1-7, Science direct, Scopus ,SCI ISSN- 0140 – 3664 <a href="https://doi.org/10.1016/j.comcom.2019.12.058">https://doi.org/10.1016/j.comcom.2019.12.058</a>, Impact Factor: 4.08, cited by 28.</li> <li>3. Simulation and comparison of single and differential ended CG-CS LNA for CognitiveRadio, B.Sarala, S.Rukmani Devi, Jasmine Hepzibah, P.Gunasekhar , J. Joseline Jeya Sheela- International journal of wavelets multiresolution and Information Processing, April 2021,</li> </ol>			

4. Page no: 2150013, SCIE, Scopus. <https://doi.org/10.1142/S0219691321500132>, Vol. 19, No. 05, 2150013 (2021), impact factor: 1.04, cited by 1.
5. Glioma brain tumor detection using dual convolutional neural networks and histogram density segmentation algorithm, B Sarala, G Sumathy, AV Kalpana, J Jasmine Hephipah- Biomedical Signal Processing and Control, March 2023, Page no: 104859, SCIE, Scopus, WOS, <https://doi.org/10.1016/j.bspc.2023.104859>, impact factor: 5.076
6. A survey on management of spectrum scarcity issues and research challenges involved in finding creative techniques and solutions to data insufficiency tribulations – Cognitive Radio by B.Sarala, Dr.S.Rukmanidevi, D.S.Bhargava, R.Dhanalakshmi, .A.V.Kalpana in GEDRAG & ORGANISATIE REVIEW - ISSN:0921-5077, VOLUME 33 : ISSUE 04 – 2020, Page No:522, Dec 2020, <https://www.doi.org/10.37896/GOR33.04/061>, WOS
7. A real time clock based artificial intelligent Medi Robot by Mrs.B.Sarala , R.Madhumitha, D.Nishevitha, M.Preethi in International journal of science & Innovation Engineering & Technology ( IJSIWET , May 2019). ISSUE VOLUME 1. ISBN 978-93-81288-18-4.
8. A novel authentication mechanism for cognitive radio network published in International journal of recent Technology & Engineering (IRJTE), Scopus Indexed. ISSN: 2277-3878, Volume-8 Issue-4, page no : 713 to 718 November 2019, B.Sarala, S.Rukmani Devi, M.Suganthy, S.Jhansi Ida, page 5, cited by 3. <https://www.ijrte.org/wp-content/uploads/papers/v8i4/D6499118419.pdf>, cited by 8.
9. Lab view based non-invasive single channel field electrocardiogram extraction IEEE, Suganthy M, Immaculate Joy S, B.Sarala, International conference on energy system & Information Processing (ICESIP), June 2019, cited by 4.
10. EEG Based Blink Talk by Expedient Of Brain Sense by B.Sarala, B.Poojitha D.Pooja, P.Harini and K.Ilangovan in journal of Xidian University,Scopus, Volume 14, Issue 9, page 714-722. September 2020, ISSN No : 1001 – 2400, <https://doi.org/10.37896/ju1y4.9/079>
11. Amalgamated Approach for Bone Tumor Detection From MRI Scan Imagery by N. Chathanya, D.Prudhiv, G.Vishnu Sai Reddy, B.Sarala and K.Ilangovan in journal of Xidian University,Scopus, Volume 14, Issue 9, page 802-811, September 2020, ISSN No :

	1001 – 2400, <a href="https://doi.org/10.37896/jxu14.9/086">https://doi.org/10.37896/jxu14.9/086</a>
12.	Building Social Bot with Python and Tweepy by B.Sarala, Rithika A. Chezhian, Praneetha K, Nivetha S, K.Ilangovan – Turkish Online Journal of Qualitative Inquiry- Scopus- Issue 12(9) page no 7039-7046, August 2021. <a href="https://www.tojqi.net/index.php/journal/article/view/7571">https://www.tojqi.net/index.php/journal/article/view/7571</a> .
13.	Emergency Medical Assistant System by B.Sarala, S.Narmada Devi, M.Nivetha, J.Jasmine Hepzibah, J. Joseline Jeya Sheela, K.Ilangovan-SSRN Elsevier digital library, Scopus, <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3883277">https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3883277</a> , August 2021
14.	Health Supervision Using IOT by B.Sarala, S.Neeraj, P.Sasidhar Varma,P.Sailakshmi Reddy, K.Ilangovan - Turkish Online jJournal of Qualitative Inquiry- Scopus- Issue 12(9) page no 7047-7055, August 2021. <a href="https://www.tojqi.net/index.php/journal/article/view/7574">https://www.tojqi.net/index.php/journal/article/view/7574</a>
15.	Development of Miniaturized All-terrain Vehicle For Surveying of Tunnels, Jeevitha , Maganti Rasagna , Lakshmi Priya Kota , A.Iyswariya ,B.Sarala ,Turkish Online Journal of Qualitative Inquiry 12 (Issue 5), 2374 – 2378. K.Ilangovan – Turkish Online Journal of Qualitative Inquiry- Scopus- Issue 12(9) page no 7039-7046, August 2021. <a href="https://www.tojqi.net/index.php/journal/article/view/7571">https://www.tojqi.net/index.php/journal/article/view/7571</a> .
16.	Vehicle Guide To Prevent Accident , K. Jeevitha a, Ugenthar V b, Shah Nawaz S c , Venkatesh S d ,B.Sarala, Turkish Online Journal of Qualitative Inquiry 12 (Issue 5), 2366 – 2373. <a href="https://www.tojqi.net/index.php/journal/article/view/1593">https://www.tojqi.net/index.php/journal/article/view/1593</a>
17.	Human Breath Detection Using Textile Antenna , J.Joselin Jeya Sheela, Lakshmi Narayanan P, Karthikeyan R, Turkish Online Journal of Qualitative Inquiry 12 (Issue 9), 7062 – 7067. <a href="https://www.tojqi.net/index.php/journal/article/view/7577">https://www.tojqi.net/index.php/journal/article/view/7577</a>
18.	Elegant Detection of Human Voice , B.Sarala, I.Sowmy, B.Sathyasri, R.Hemalatha, M.Suganthy- AIP Conference Proceedings 2523, 020023 (2023); <a href="https://doi.org/10.1063/5.0110587">https://doi.org/10.1063/5.0110587</a> , 30 January 2023
19.	Vehicle Seat Vacancy Identification Using Image Processing

	<p>Technique, Darwin Nesakumar A, Suresh T , Kanimozhi P, Lokeshwari A , Manjuparkavi T , B.sarala, P.Mugila - AIP Publishing, 2519,050023(2022) – Scopus,WoS, <a href="https://doi.org/10.1063/5.0109641">https://doi.org/10.1063/5.0109641</a>, Oct 2023.</p> <p>20. Automated Seed Sowing and Watering Robot using Wireless Sensor Network,Dr.M.Somasundaram , A.Naveen Kumar, B.Nikhil Vamsi, B.Vishal Chowdary,S.P.Karthikeyan, B.Sarala-AIP Publishing – Scopus, WOS,2519,050027(2022), <a href="https://doi.org/10.1063/5.0109648">https://doi.org/10.1063/5.0109648</a> , Oct 2022</p> <p>21. IoT enabled smart logistics vehicle using semantic Communication, Sujatha.R, Mahaboob Basha, B.Sarala,J.Jasmine Hepzipah, N.G.Praveena, D.SivaSundarRaja. International journal of Intelligent System &amp; Applicationin Engineering. ISSN-2147-6799, DOI 10.1039/b000000x., Dec 2022</p> <p>22. Crptography Based Lifi for Patient Privacy and Emergency Health Service Using IoTn S.Vijayalakshmi,M.P.Chandhra sekar, M.Suganthy ,J.Jasmine Hepzipah , B.Sarala ,N.G.Praveena , D.SivaSundarRaja. International journal of Intelligent System &amp; Applicationin Engineering. ISSN-2147-6799, DOI 10.1039/b000000x.,Dec 2022</p> <p>23. Improved DASH Architecture for Quality Cloud Video Streaming in Automated Systems by S. Vijayalakshmi,S. Vishnupriya,B. Sarala,Bhuvan Karthik .Ch, R. Dhanalakshmi, J. Jasmine Hepzipah, R. Pavaiyarkarasi in International Journal on Recent and Innovation Trends in Computing and CommunicationISSN: 2321-8169 Volume: 11 Issue: 2s DOI: <a href="https://doi.org/10.17762/ijritcc.v11i2s.6026">https://doi.org/10.17762/ijritcc.v11i2s.6026</a>,Dec 2022.</p> <p>24. Linear (1X4) UWB Patch Antenna for various ISM band Application by Y.M.Blessy, V.S.Prabhu,M.Perarasi, J.Jasmine Hepzipah, B.Sarala, M.S.Kavitha, T.D.Subha in <u>Vol. 56 No. 1 (2023): Pakistan Heart Journal</u> ISSN: 2321-8169 Volume: 56 Issue:1 DOI: <a href="https://portal.issn.org/resource/ISSN/2227-9199">https://portal.issn.org/resource/ISSN/2227-9199</a>, Jan2023 <a href="https://www.pkheartjournal.com/index.php/journal/article/view/1189">https://www.pkheartjournal.com/index.php/journal/article/view/1189</a></p>
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	<p>25. Optimal Algorithm for Power Assignments in OFDM-form of Cognitive Radio Technique by A.Darwin Nesakumar1, M.S.Kavitha, B.Sarala, J.Jasmine Hephzipah, R.Pavaiyarkarasi, M.Perarasi, T.D.Subha in Evaluation of salivary alpha amylase as an inflammatory biomarker in chronic periodontal disease: across-sectional study, 12(Special Issue 2), 1929-1937, May 2023.  <a href="https://www.eurchembull.com/uploads/paper/f6ad3047a9738812f0a68f72af039333.pdf">https://www.eurchembull.com/uploads/paper/f6ad3047a9738812f0a68f72af039333.pdf</a>  doi: <a href="https://doi.org/10.31838/ecb/2023.12.s2.247">10.31838/ecb/2023.12.s2.247</a></p> <p>26. Optimal Algorithm for Power Assignments in OFDM-form of Cognitive Radio Technique by A.Darwin Nesakumar1, M.S.Kavitha, B.Sarala, J.Jasmine Hephzipah, R.Pavaiyarkarasi, M.Perarasi, T.D.Subha in Evaluation of salivary alpha amylase as an inflammatory biomarker in chronic periodontal disease: across-sectional study, 12(Special Issue 2), 1929-1937, May 2023.  <a href="https://www.eurchembull.com/uploads/paper/f6ad3047a9738812f0a68f72af039333.pdf">https://www.eurchembull.com/uploads/paper/f6ad3047a9738812f0a68f72af039333.pdf</a>  doi: <a href="https://doi.org/10.31838/ecb/2023.12.s2.247">10.31838/ecb/2023.12.s2.247</a></p>
<b>Professional Memberships</b>	Count :06  ISTE CSTA IAENG IACSIT IRED NITTSD
<b>Consultancy Projects Completed</b>	Count :03
	Count :10

<b>Awards Received</b>	<ol style="list-style-type: none"> <li>1. Mentor role for online NPTEL certification course "Introduction to Internet of Things" July- Dec 2019.</li> <li>2. Mentor role for online NPTEL certification course "CMOS Digital VLSI design" Jan- July 2020.</li> <li>3. Mentor for the product titled "Smart Bus tracking &amp; Occupancy Checking System" technology enabling centre, Anna University Feb 2020.</li> <li>4. Mentor for best paper " automatic door lock System using IOT" All India students Committee (ASIC), Hosur local Centre, Hosur</li> <li>5. Mentor for best paper " Border Alert System" All India students Committee (ASIC), Hosur local Centre, Hosur</li> <li>6. Mentor role for online NPTEL certification course "Introduction to Internet of Things" Jan- April 2022.</li> <li>7. Mentor role for online NPTEL certification course "Enhancing soft skills &amp; Personality" Jan- April 2022.</li> <li>8. Received Best Faculty Advisor Awards 2021, All India students Committee (ASIC), Hosur local Centre, Hosur.</li> <li>9. Received Best Faculty Advisor Awards April 2022, All India students Committee (ASIC), Hosur local Centre, Hosur.</li> <li>10. Received Best Faculty Advisor Awards OCT 2022, All India students Committee (ASIC), Hosur local Centre, Hosur</li> </ol>
<b>Research grants Received</b>	---
<b>Orchid Link / ID</b>	<a href="https://orcid.org/0000-0001-6324-5142">https://orcid.org/0000-0001-6324-5142</a>
<b>Google Scholar Link / ID</b>	<a href="https://scholar.google.com/citations?user=dpJAzP8AAAAJ">https://scholar.google.com/citations?user=dpJAzP8AAAAJ</a>

<b>Vidwan Link / ID</b>	<a href="https://vidwan.inflibnet.ac.in/profile/305420">https://vidwan.inflibnet.ac.in/profile/305420</a>
<b>Research Gate Link / ID</b>	<a href="https://www.researchgate.net/profile/B-Sarala">https://www.researchgate.net/profile/B-Sarala</a>
<b>Scopus Link / ID</b>	<a href="https://scopus.inflibnet.ac.in/profile/305420">https://scopus.inflibnet.ac.in/profile/305420</a>