

FACULTY PROFILE FORMAT (Format 3)		
Staff Name	:	Dr. Sumithra Sofia.D
Faculty ID	:	TEC61
Designation	:	Assistant Professor
Qualification	:	M.E., Ph.D.
Teaching Experience	:	3 years
Area of Specialization	:	Wireless Communication, Mobile Adhoc Networks, Cognitive Radio Networks
Subjects Handled	:	<ol style="list-style-type: none"> <li>1. Digital Principles and Computer Organization</li> <li>2. Neural Networks and Deep Learning</li> <li>3. Mobile Adhoc Networks</li> <li>4. Wireless Communication</li> <li>5. Cognitive Radio Networks</li> </ol>
Books Published	:	-
Journals Published	:	<ol style="list-style-type: none"> <li>1. <b>Sumithra Sofia. D</b>, Shirley Edward. A, "Performance Comparison between different optimization techniques in Cognitive Radio for Spectrum Allocation", Wireless Personal Communications Vol.125, pp.143–157, Springer, <a href="https://doi.org/10.1007/s11277-022-09545-w">https://doi.org/10.1007/s11277-022-09545-w</a>,</li> <li>2. <b>Sumithra Sofia. D</b>, Shirley Edward. A, "Auction based Game Theory in Cognitive Radio Networks for Dynamic Spectrum Allocation", Computers and Electrical Engineering, Vol.86, pp.883-907, Elsevier, <a href="https://doi.org/10.1016/j.compeleceng.2020.106734">https://doi.org/10.1016/j.compeleceng.2020.106734</a></li> <li>3. <b>Sumithra Sofia. D</b>, Shirley Edward. A "Overlay Dynamic Spectrum Sharing in Cognitive Radio for 4G and 5G using FBMC", Materials Today Proceedings, ISSN 2214-7853, Elsevier, <a href="https://doi.org/10.1016/J.MATPR.2021.07">https://doi.org/10.1016/J.MATPR.2021.07</a></li> <li>4.<b>Sumithra Sofia. D</b>, Shirley Edward. A "Interweave Dynamic Spectrum Sharing for Cognitive Adhoc Networks using Genetic Optimization Algorithm", IEEE 4th International Conference on Computing, Power and Communication Technologies, pp.1-6 <a href="http://dx.doi.org/10.1109/GUCON50781.2021.9573765">http://dx.doi.org/10.1109/GUCON50781.2021.9573765</a></li> <li>5. <b>Sumithra Sofia. D</b>, Shirley Edward. A "Distributed Auction Mechanism for Dynamic Spectrum Allocation in Cognitive Radio Networks", International Conference on Innovative Data Communication Technologies and Application</li> </ol>

		(LNDECT),Vol.46,pp.172-180,Springer, <a href="https://link.springer.com/chapter/10.1007/978-3-030-38040-3_20">https://link.springer.com/chapter/10.1007/978-3-030-38040-3_20</a>
<b>Conference /Workshop Attended</b>	:	<p>1.<b>Sumithra Sofia. D</b>, Shirly Edward. A “Survey on Dynamic Spectrum sharing in Cognitive Radio Networks for 4G and 5G” ICREACT 2021, SRM Institute of Science and Technology, Dept of ECE May (3-4) 2021.</p> <p>2.<b>Sumithra Sofia. D</b>, Shirly Edward. A, SRMIST” Dynamic Spectrum Allocation for Cognitive Adhoc Networks using Genetic Optimization Algorithm “(ICEPHAST- International Conference on Electronics, Photonics, and Smart Technologies 2020) Dept of ECE, November 16 -18, 2020.</p> <p>3. <b>Sumithra Sofia. D</b>, Shirly Edward. A “Distributed Auction Mechanism for Dynamic Spectrum Allocation in Cognitive Radio Networks”, ICIDCA 2019, RVS College of Engineering and Technology, October 17-18,2019 at Coimbatore, India. Published in Springer Lecture Notes in Data Engineering And communication Technologies in chapter [978-3-030-38039-7, ICIDCA 2019, LNDECT 46, schedule for paper approval (479594_1_En, Chapter 20)].</p> <p>4.<b>Sumithra Sofia. D</b>, Shirly Edward. A, “Distributed Interference Based Spectrum Allocation in Cognitive Radio Networks”, REACT 2020, Web conference in ECE techniques, SRM Institute of science and Technology, Vadapalani.</p> <p>5.<b>Sumithra Sofia. D</b> “Robotics and Types of Robots”, from Rajalakshmi college.</p> <p>6.<b>Sumithra Sofia. D</b> “Color Texture Segmentation in Deformable Surface Model” from Karunya University.</p>
<b>Patent Details</b>	:	-
<b>Funded Project Details</b>		-