

Name : Dr. SIVARANJANI.R

**Designation**: Assistant Professor

Department: Information TechnologyQualification: B.Sc(Maths),MCA,Ph.D

**Experience**: Teaching -14Years 7 Months

**Research**: 9Years

**AreaofSpecialization(s)**: Networking

**Email(OfficialID)** : sivaranjanir@psgrkcw.ac.in

## AcademicQualifications

Degree	Branch	Institution/UniversityName	Year of Graduation
Ph.D.	Computer Science	Hindusthan College of Arts and	2021
		Science,(Bharathiar University)	
MCA	Computer	RMK Engineering College, (Anna	2005
	Applications	University)	
B.Sc.	Mathematics	JBAS Women's College, (Madras	2002
		University)	

# **Research Publications (Indexed)**

## International

➤ "Particle Swarm Optimization Based Approach for Reduction of Energy Consumption and Time Period in Wireless Sensor Network", Vol 13(11):3927-3934, Aug 2018, Journal of Engineering and Applied Sciences,ISSN:1816-949X(ScopusIndexed).

https://medwelljournals.com/abstract/?doi=jeasci.2018.3927.3934

"Efficient Health Monitoring Networks Using Secured Energy Aware (SEA) Scheme", Volume-8 Issue-10, pp. 3643-3649, Aug 2019, International Journal of Innovative Technology and Exploring Engineering, ISSN:22783075,

"Wireless Sensor Network Energy-Efficient Secure Pattern Based Data Aggregation", Volume 9, Issue 03, March 2020, International Journal of Scientific & Technology Research, ISSN 2277-8616, Scopus.
<a href="https://www.ijstr.org/final-print/mar2020/Wireless-Sensor-Network-Energy-efficient-Secure-Pattern-Based-Data-Aggregation.pdf">https://www.ijstr.org/final-print/mar2020/Wireless-Sensor-Network-Energy-efficient-Secure-Pattern-Based-Data-Aggregation.pdf</a>

### Other Publications: International/National

- ➤ "Survey of Healthcare Management using Wireless Sensor Networks (WSNS)", Issue 09, Volume 4 (September 2017), International Journal of Innovative Research in Advanced Engineering (IJIRAE), ISSN: 2349-2163. IJIRAE/RS/Vol.04/Issue09/JNAE10091
- "Secure and Efficient Energy Based Data Sharing Scheme in Wireless Sensor Networks", Volume 6, Issue 2, pp. 30-37, June 2019, International Journal of Research and Analytical Reviews (IJRAR), ISSN-E 2348-1269, P-ISSN 2349-5138 <a href="https://ijrar.org/viewfull.php?&p\_id=IJRAR19K4682">https://ijrar.org/viewfull.php?&p\_id=IJRAR19K4682</a>
- "Energy Efficiency Based Data Transmission using GSA Optimization in Wireless Sensor Network", Volume 6, Issue 2, ISSN: 2456-3307, 21 March 2020, International Journal of Scientific Research in Computer Science, Engineering and Information Technology. <a href="https://ijsrcseit.com/CSEIT206227">https://ijsrcseit.com/CSEIT206227</a>
- "Energy-Efficient Architecture for Wireless Sensor Networks in Healthcare Applications", Volume 8, Issue 3, May-Jun 2020, International Journal of Computer Science Trends and Technology (IJCST), ISSN: 2347-8578. <a href="http://www.ijcstjournal.org/volume-8/issue-3/IJCST-V8I3P8.pdf">http://www.ijcstjournal.org/volume-8/issue-3/IJCST-V8I3P8.pdf</a>
- "Cluster based Energy Efficiency of Wireless Sensor Network for Healthcare Data", Volume 8, Issue 4, December 2020, International Journal of Engineering Development and Research (IJEDR), ISSN: 2321-9939. https://www.ijedr.org/papers/IJEDR2004042.pdf
- "Risk Analysis and Security Idea for e-Healthcare Data Propagation and Storage" Volume XIV, Issue
   7, 2022, Journal of Xi'an University of Architecture & Technology ISSN No: 1006-7930.

"The SEAST: Scheme for Efficient Health Monitoring in Wireless Sensor Networks" Volume 11 Issue
 12 December 2023, International Journal of Creative Research Thoughts

https://ijcrt.org/generatecerti.php?&pid=IJCRT2312558

### **Book Published**

- Computer Networks", Aruna Publications, 2017, ISBN:941-78-1353-721-7.
- ➤ "The Security Essentials Data, Network & Computer", Notion Press Publisher, Jan 2023, ISBN-139798889236719.

https://www.amazon.in/Security-Essentials-Data-Network-Computer/dp/B0BRCRXQ9W

➤ "A Handbook on BIG DATA Analytics", Scientific Research Publication, 2024, ISBN: 9798321466865

# **Book Chapter Published**

"An Overview of the Big Data Technology for Computer Assisted Learning" in the IGI Global Book Chapters 2022.

"Effective Methods of Artificial Intelligence in Health Care Industry A Multidisciplinary Perspective" in the Advances in Future Trends and Technology, Chapter 10, 2024, ISBN – 978-81-963688-3-8 2024

## **Letter of Appreciation**

- ➤ Participated in Digital Teaching Techniques 29 Jun 2020 to 04 Jul 2020, ICT academy Microsoft Azure Fundamentals from 28 Mar 2022 TO 30 Mar 2022.
- ➤ Letter of Recognition for being IBM Co-Ordinator and DBT Star Scheme Co-Ordinator.

### Reviewer in journal

Reviewer at "Measurement: Sensors" Elsevier Journal.

## **Paper Presentations in Conference**

### International

➤ "Secure and Energy Efficient Based Healthcare Data Transmission Wireless Sensor Network", Volume 31 pp. 327-333, Aug 2019, International Conference on Computer Networks, Bigdata and IoT (ICCBI-2018) LNDECT, ISBN:978-3-030-24642-6, Springer. <a href="https://link.springer.com/chapter/10.1007/978-3-030-24643-3">https://link.springer.com/chapter/10.1007/978-3-030-24643-3</a> 39

# **Participation in Conference**

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- National Conference on Emerging Trends in Computing & Communication organized by Department of Computer Science, Computer Application, Information Technology, Computer Technology, Computer Science with Cognitive System, Artificial Intelligence & Machine Learning, Hindusthan College of Arts & Science, Coimbatore on 21st December 2023
- Second International Conference on Recent Trends in Computer Science and Data Analytics 2024(ICRTCSDA'24) organized by the Department of Computer Science with Data Analytics , KPR College of Arts Science & Research , Coimbatore on 2nd February 2024.
- \* "Energy-Efficient Routing Based Distributed Cluster for Wireless Sensor Network", pp. 489–497, 2020, ICIDCA 2019, LNDECT 46, ISSN 2367-4512, ISSN 2367-4520 (electronic), ISBN 978-3-030-38039-7 ISBN 978-3-030-38040-3 (eBook), International Conference, Springer. <a href="https://link.springer.com/chapter/10.1007/978-3-030-38040-3\_55">https://link.springer.com/chapter/10.1007/978-3-030-38040-3\_55</a>

## **Participation in Faculty Development Programme**

- FDP on KCW Teaching and Learning Centre, by PSGR Krishnammal College for Women
- FDP on "Data Acquisition with Python", PSGRKCW
- Faculty Development Program on "Empowering Education with AI based Learning Concept for Global Competence" organized by PG and Research Department of Computer Science, Holy Cross College, Tiruchirappalli
- Virtual Faculty Development Programme on "Integration of Technology in Teaching: A Faculty Development Perspective" organized by IQAC Cell Dr.R.V. Arts and Science College

- One Week National Level Faculty Development Program on" Teaching Strategies A Pedagogy"
   Mode: Virtual(Zoom Platform), organized by Department of Computer Science and Applications, SRM Institute of Science and Technology
- FDP on "AI's Role in Modern Research & Development" organized by Sree Sakthi Engineering College
- FDP on "Artificial Intelligence's Impact on Transforming Software, Robotics, Electrical, Electronics & Mechanical Fields " Series -3 from 21/7/2025 to 26/7/2025 organized by Dhaanish Ahmed College of Engineering.

# **Participationin Webinar**

• online training/webinar on "IEEE *Xplore*" on 26<sup>th</sup> July 2024

Conference/Seminar/WorkshopOrganized

❖ Department Level coordinator for Two Days International Conference on Advances in Artificial Intelligence and Machine Learning "Intelligent Futures: Unmasking the Next Wave of AI and ML Innovations organized by the Department of Computational Studies, PSGR Krishnammal College for Women on 22nd & 23rd Feb 2024

### Awards/Honors

Awards/Honors	Agency/Institute	Year of Award
Best Faculty – Outstanding	Vivekananda	2025
Institutional Contribution Award	Institute of	
	Management	
	Studies	
Excellence in Research and	SNS Institutions	2025
Publication Award		
Best women Faculty Award	International	2022
,	Education Research	
	& Development	
Vocational Service Award in	Rotary Club of	2021
recognition of the exemplary	Coimbatore	
services rendered in the field of	Downtown	
education		