## **Faculty Profile**

Name	: Dr. K. SAROJINI
Designation	: Assistant Professor
Address	: No.21, Sri Andal Nagar, Uppalipalayam (PO), Coimbatore – 641 015.
Contact Number	: 9442614529
Email Id	: saromaran@gmail.com
Date of Joining in Collegiate Education	: 29/07/2015
Date of Joining in the Present College.	: 02/01/2023



Academic Profile

Degree	Institute /College	University	Period
B.Sc	Seethalakshmi Ramasamy	Bharathidasan University	1993
	college, Trichy		
MCA	Bharathidasan University	Bharathidasan University	1996
M.Phil	Manonmaniam Sundaranar	Manonmaniam Sundaranar	2003
	University	University	
Ph.D	Mother Teresa Women University	Mother Teresa Women	2013
		University	

:

## **Teaching Experience**

i)	Total	:	26 years
ii)	UG	:	26 years
iii)	PG	:	26 years

Name of the College	Position held	Period
SNR Sons College, Coimbatore	Associate Professor	7 <sup>th</sup> Jan 1998 to 28 <sup>th</sup> July 2015
LRG Govt Arts College for	Assistant Professor and HEAD	29 <sup>th</sup> July 2015 to 2 <sup>nd</sup> Jan 2023
Women, Tirupur		
Chikkanna Govt Arts College-	Assistant Professor	2 <sup>nd</sup> Jan 2023 to till date
Tirupur		

#### Honors and Research Awards

:- Received Best Paper Award in International Conference

#### Field of Interest

i) **Teaching** : Computer Science

# ii)Research: Data Mining, Data Analytics, ImageProcessing, Network SecurityResearch Guidance: M.Phil (1147/1036/A2/2004-27/01/2004)Guidance Number: Ph.D(23437-028805/A2/2016-07/01/2016)

S.No	M.Phil/Ph.D	Name of the Student	Thesis Title	Completed/Ongoing
1.	Ph.D	KAVITHA	-	Ongoing
2.	Ph.D	N SUGANTHI	-	Ongoing
3.	Ph.D	PRIYADHARSHINI	-	Ongoing
4	Ph.D	MARIA SHEEBA	Improvised Deep Neural Network	Ongoing
5.	Mphil.	DIVYA	Using Eagle Strategy Optimization for Agriculture Land	Completed
			<b>Drought Prediction</b>	

## Funded Projects :- ----

#### Membership in Professional Bodies:-

S.No	Name of the Professional Body	Member ship Detail with Number
1.	Board of studies in Computer Science(PG) Bharathiar University	Chairman (PG)
2.	Board of studies in Computer Science(UG) Bharathiar University	Member (UG)
3.	Ramakrishna College of Arts and Science, Coimbatore	Member (PG)
4.	Board of Studies in MCA of Govt. Arts College, Coimbatore	Member
5.	Bharathiar University Inspection Commission member for Research Programme.	Member
6.	Bharathiar University Inspection Commission Convenor for Bsc CS programmes.	Convenor
7.	Bharathiar University Inspection Commission Convenor for Bsc CS, Bsc CS(AI & DS), Bsc IT, BCom, BCom CA, MCom , BBA, BSc Costume Design.	Convenor

		T			
8.	Bharathiar University Research P Committee External Expert to Rese	-			
Researc	Research Publications				
i)	Research Papers	: 24 (Annexure-I)			
Nationa	al and International Conferences	: 22 (Annexure – II)			
i)	Participated & Paper Presented	: 12			
ii)	Poster Presented	:			
Conference/ Seminars Organized.		<ul> <li>1. Organized TANSCHE Sponsored Zonal Level Faculty Development Programme on "In-Service Teacher Training Programme in Computer Applications and Technology " on 05.05.2022 &amp; 06.05.2022.</li> <li>2. Organized National Webinar on " Recent Trends and Job Opportunities in IT Industry" on 5<sup>th</sup> June 2020.</li> <li>3. Organized various Seminars at Inter- College level</li> </ul>			
Works	hop attended	: - 30 (Annexure – III)			
<b>Resource Person/Invited Lectures</b>		:- 1. Invited talk at GVN College, Pollachi			
		2 Chief quest at New Little Star School			

2. Chief guest at New Little Star School,
Pannimadai, Coimbatore

Course	University/Institute	Subject	Period
Orientation Course	Bharathiar University	-	16/12/2016-12/01/2017
Refresher Course	Bharathiar University	Computer Science	13/02/2019-05/03/2019
Refresher Course	Kerala University	Computer Science	23/02/2021-08/03/2021
Refresher Course	Madurai Kamarajar University,	Computer Science	02/11/2022 -15/11//2022
Short Term Course	TLC-Ramanujan college, university of Delhi	Open Source Tools for Research	08/06/2020-14/06/2020
Short Term Course	TLC-Ramanujan college, university of Delhi	Phychological Skills for Effective Teaching and Learning	01/06/2021-07/06/2021

Short	Term Course	Bharathidasan university	MOOCs and Open Educational Resources	05/01/2022-11/01/2022	
Short	Short Term Course TLC-Ramanujan colleg university of Delhi		Data Analytics and Modeling Tools for Research	16/01/2022-22//01/202	
Academi	c Activities		· · · · · · · · · · · · · · · · · · ·		
i)	Subject Hand	le.	: Computer Sci	ence Subjects	
ii)	<b>Class Advisor</b>		: UG & PG		
iii)	Special Coach	ing	:		
iv)	Student Com	munity Beneficial Activiti	ies :		
V)	<b>Co-curricular and extra curricular activities</b> : Computer Learning Programme.				
Professio	nal Activities				
i)	Reviewer	: R	eviewer in Rest Publication	s,	
		R	Reviewer in International Conference PRIME 2019		
ii)	<b>Board of Stud</b>	lies/UR : Cł	<b>R</b> : Chairman - Board of studies in		
		computer science (PG), Bharathiar University.			
iii)	Examiners/ So	crutiny : Bł	: Bharathiar & Madurai Kamarajar Universities		
		B	Bharathiar University Semester QP Scrutiny		
iv)	iv) Senates/Syndicate :				
Vational / International Collaborators :					

# Annexture – I

## **Research Publications**

#### **List of Publications**

- Dr. K.Sarojini"Supervised Feature Subset Selection based on Modified Fuzzy Relative Information Measure for Classifier Cart", International Journal of Engineering Science and Technology, Vol 2(5), Pg.2456 - 2465, 2010, Impact Factor 1.85
- Dr. K.Sarojini, "Feature Subset Selection based on Normalized Mutual Information Measure for Boundary Samples" International Journal of Research and Review in Computer Science, IJRRCS, Science Academy Publisher, United Kingdom Vol 2(2), Pg.596 – 603, April 2011, ISBN: 2079 – 2557.
- Dr. K.Sarojini, "Prediction of Classification Accuracy with selected features in • unsupervised data", International Journal of Recent Trends in Engineering", Pg 32-36, Vol.3(1), Academy Publishers, Finland, May 2010, ISBN :1797 - 9617, Impact **Factor 0.2334**

- Dr. K.Sarojini, "Supervised Feature Subset Selection using Extended Fuzzy Absolute Information Measure for different Classifiers", International Journal of Computational Intelligence and Informatics, IJCII, Vol. I(1), **June-2011**.
- Dr. K.Sarojini, "Unsupervised bidirectional feature selection based on contribution entropy for medical database ", International Journal of Health care Technology and Management, Inderscience Enterprise Limited, Pg 364 -378, Vol.12(5/6), 2011.
- Ms. M.Saranya, Dr. K.Sarojini, "A study on Data Mining Methodologies and Trends with Big Data Healthcare Analytics / Analysis", International journal of Advance Research in Computer and Communication Engineering, Vol 4, Issue 10, October 2015.
- Ms. M.Saranya, Dr. K.Sarojini,"Prediction of Bone loss rate based on OesteoporosisRisk Features", International journal of Science and Research, Vol 5, Issue 3, March 2016, ISSN:2319-7064.
- Ms. M.Saranya, Dr. K.Sarojini, "An Improved and Optimal Prediction of Bone Disease based on Risk Factors ", International journal of Computer Science and Information Technologies, Vol 7(2), 2016, 820-823, ISSN:0975-9646.
- Dr. K.Sarojini, Mrs. N Suganthi, "Impacts Of IOT in Big Data Analysis", International journal of advance and innovative research, Volume 6, Issue 1, January 2019, ISSN: 2394-7780, Volume 6, Issue 1, January 2019.impact Factor :3.25
- Mrs. N Suganthi, Dr. K.Sarojini, "Study On Data Preprocessing Techniques For Text Mining", JASC: Journal of Applied Science and Computations, ISSN NO: 1076-5131, Volume VI, Issue IV, April/2019, Impact Factor:5.8.
- Mrs. S. Kavitha & Dr.K.Sarojini, "A Study on Data Mining in Health Care" JASC: Journal of Applied Science and Computations, ISSN NO: 1076-5131, Volume VI, Issue IV, April/2019, Impact Factor:5.8.
- Mrs. N Suganthi , Dr. K.Sarojini, "Review on Supervised Feature Selection methods for High Dimensional Data", The International journal of Analytical and Experimental Model Analysis, Volume XII, Issue VII, July 2020, ISSN number: 0886-9367, impact Factor:1.35
- Mrs. D.Priyadarshini, Dr. K.Sarojini, A Comprehensive Survey on Role of Datamining Techniques in Intrusion Detection System", The International journal of analytical and experimental modal analysis, Volume-12, Issue-11, November-2020, ISSN NO:0886-9367.
- Mrs. S. Kavitha & Dr.K.Sarojini, "De-noising of tomato fruit image using spiral seed filte", IT in Industry, Volume 9, Issue1, March 2021.

- Mrs. D.Priyadarshini, Dr.K.Sarojini, "A Novel Technique for IDS in Distributed Data Environment Using Merkel Based Security Mechanism for Secure User Allocation", Turkish Journal of Computer and Mathematics Education, April 2021, e-ISSN : 13094653.
- Mrs. P. Divya & Dr.K.Sarojini, "Improvised Deep Neural Network Using Eagle Strategy Optimization for Agriculture Land Drought Prediction ", International Journal of Creative Research Thoughts, Volume 9,Issue 5. May 2021 ISSN:2320 – 2882.
- Dr.K.Sarojini & Mrs. P. Divya, "A Survey Of Agriculture Land Drought Impacts and Drought Monitoring", International Research Journal of Modernization In Engineering Technology and Science, Volume 3,Issue 6., June 2021 ISSN:2582-5208.
- Mrs. C.Maria Sheeba & Dr.K.Sarojini, "Data mining classification techniques to predict the placement of a student based on academic details", International Journal of Multidisciplinary Research Review, volume 7, Issue 8, 50, August 2021, ISSN 2395 -1877
- Mrs. S. Kavitha, Dr. K.Sarojini, "A Review On Image Segmentation Algorithms For Disease Detection In Leaves And Fruits", Journal of Emerging technologies and innovative research, Feb 2022. <u>https://doi.org/10.5281/zenodo.6510667</u>,
- Mrs. S. Kavitha & Dr.K.Sarojini, "A Review On Fruit Disease Detection And Classification Using Computer Vision Based Approaches", International Journal of Innovative Science and Research Technology, Volume 7, Issue 3, March 2022, ISSN No:-2456-2165.
- Mrs. N Suganthi, Dr. K.Sarojini, "Feature Extraction based on GLCM and GLRM Methods on COVID-19 Dataset", Springer, Volume 967, January 2023, ISBN:978-981-19-7168-6, impact Factor:69.504.
- Mrs. S. Kavitha, Dr. K.Sarojini, "Multi-scale region-of-interest based deep learning for fruit disease identification and classification", ARPN Journal of Engineering and Applied Sciences, February 2023, Vol. 18, No.4. ISSN 1819-6608.
- Mrs. N Suganthi, Dr. K.Sarojini, "A Study on Deep Convolution Neural Networks", International Conference on Computational Intelligence and Biological Seiences(ICCIBS), isbn-978-93-5996-261-0, October 2023.impact Factor:59.558.
- C.Maria Sheeba and Dr.K.Sarojini, "Optimal feature selection and detection of sickle cell anemia detection using enhanced whale", Journal of Current Science and Technology, 2023, ISSN 2630-0656.<u>https://ph04.tci-thaijo.org/index.php/JCST/article/view/1737</u>

#### **Book Publication**

• "Fundamentals of Computers" for ITI Students, Published by Global Research Publications on 2008.

## Annexture – II

## **National Conferences**

- Dr. K.Sarojini, "A Proposed Basic Security Architecture for Mobile Commercee Applications", in an UGC sponsored National Conference on Advances in Mobile Computing at Erode Arts College, Erode on **29<sup>th</sup> and 30<sup>th</sup> September 2005.**
- Dr. K.Sarojini, "Mobile Commerce An Emerging Application in Wireless Networking" in a state level Conference on Network Security at P.S.G.R.Krishnammal College for Women, Coimbatore on 21<sup>st</sup> Feburary 2006.
- Dr. K.Sarojini, "An Architecture for Web Usage Mining Pattern Discovery and Analysis on the Web", in National Conference on Issues and Trends in Advanced Computing at Bannari Amman Institute of Technology, Sathyamangalam, Erode, on 19<sup>th</sup> and 20<sup>th</sup> May 2006.
- Dr. K.Sarojini, "Supervised Feature Subset Selection using Extended Fuzzy Relative Information Measure for Different Classifiers" in UGC sponsored National Conference on Emerging Computing Paradigm, NCECP at Government Arts and Science College, Dhindukal, on Feb 2011.
- Dr. K.Sarojini, "Survey on measuring semantic similarity using web search engine based Applications" in National conference on computer Applications in Service Sectors: models and methods, NCCASS, on 7<sup>th</sup> September 2012.
- Dr. K.Sarojini, "A Systamatic Survey on Data Analysis and Text Mining in Current Issues", National Conference on CISSSR 13, on **28<sup>th</sup> Jan 2013.**
- Mrs. S. Kavitha & Dr.K.Sarojini, "A Survey Paper on Basics of Data Mining", National Conference on Advanced Computing, Bharathiar University, Jan 2019.
- Mrs. N Suganthi, Dr. K.Sarojini, "Study On Data Preprocessing Techniques For Text Mining", National Conference on Intelligent Learning and Computing, NCILC'19, organized by Computer Science Streams, Sri Krishna Arts and Science College, Coimbatore, on 13<sup>th</sup> February 2019.
- Mrs. S. Kavitha & Dr.K.Sarojini, "A Review Paper on Unsupervised Feature Selection Algorithms", National Conference on Machine Learning and Smart Technology, Sri Krishna Arts and Science College, Coimbatore, February 2020.

## **International Conferences**

- Dr. K.Sarojini, "Feature Subset Selection based on Fuzzy Entropy a comparative Analysis", International Conference on Recent Advancements in Electrical Sciences, ICRAES, K.S.R. College of Engineering, Tiruchengode, 8<sup>th</sup> - 9<sup>th</sup> January 2010.
- Dr. K.Sarojini, "Biderectional Feature Selection based on Contribution Entropy for Unsupervised data", International Conference on Recent Advancements in Electrical Sciences, ICRAES, K.S.R. College of Engineering, Tiruchengode, 8<sup>th</sup> - 9<sup>th</sup> January 2010.
- Dr. K.Sarojini, "Supervised Feature Subset Selection based on Extended Fuzzy Relative Information Measure for Boundary Samples", International Conference on Advances in control Communication and Power Engineering, CCPE by Association of Computer Electronics and Electrical Engineers, ACEEE, Pg 184-186, ISBN 978-81-910691-0-5, 28<sup>th</sup> July 2010.
- Dr. K.Sarojini, "Supervised Feature Subset Selection using Extended Fuzzy Absolute Information Measure for handling different Discretized data sets", International Conference and Exhibition on Biometric Technology, ICEBT 2010, PSG College of Technology Coimbatore, India, 4<sup>th</sup> September 2010. Proceeding Published by Elsevier Procedia Computer Science
- Dr. K.Sarojini, "Feature Subset Selection A Comparative Analysis of Extended Fuzzy Absolute Information Measure with consistency measure for handling boundary samples", International Conference on Operational Research for Urban and Rural Development, 43<sup>rd</sup> Annual Convention of Operational Research Society of India, ORSI 2010, Thiagaraja College of Engineering, Madurai, December 2010.
- Dr. K.Sarojini, "A Survey on Text Mining and Text Analysis in Current Issues", II<sup>nd</sup> International Conference on Competency Building Strategies in Business and Technology for Sustainable Development, on 22<sup>nd</sup> Feb 2013.
- Mrs. N Suganthi, Dr. K.Sarojini, Impacts Of Iot In Big Data Analysis", International Conference on Computer Applications and Information Technology(CAIT 2019), Organized by PG and Research Department of Computer Applications, Hindusthan College of Arts and Science(Autonomous, Coimbatore, on 24<sup>th</sup> January 2019.
- Mrs. N Suganthi, Dr. K.Sarojini, "Review on Supervised Feature Selection methods for High Dimensional Data", International Virtual Conference on An Intersection of language, Literature and Pandemic: A Contemporary Perspective,organized by the department of English on 18<sup>th</sup> July 2020.
- Mrs. S. Kavitha & Dr.K.Sarojini, "A Survey on Feature extraction and Classification Techniques for prediction of Plant Disease", 4<sup>th</sup> International Conference on Current Scenario in Pure and Applied Mathematics, Kongunadu Arts and Science College, January 2021

- Mrs. P. Divya & Dr.K.Sarojini, "Improvised Deep Neural Network Using Eagle Strategy Optimization for Agriculture Land Drought Prediction ", International Journal of Creative Research Thoughts, L.R.G Govt Arts College For Women, Volume 9,Issue 5.May 2021, ISSN:2320 2882.
- Mrs. N Suganthi, Dr. K.Sarojini, "Feature Extraction based on GLCM and GLRM Methods on COVID-19 Dataset", International Conference on Recent Trends in Advanced Computing(ICRTAC'21),Organized by Computer Science and Engineering,Vellore Institute of Technology[VIT]Chennai,11-12 November 2021.
- Mrs. N Suganthi, Dr. K.Sarojini, "Modified Whale Optimization Algorithm Based on Chaotic Logistic Map Strategy for Feature Selection on COVID-19 Dataset", International Conference on Research practices of cutting edge Technologies in Computing(ICRPCETC 2021),Sri Ramakrishna College of Arts & Science(Autonomous) Coimbatore,11<sup>th</sup> and 12<sup>th</sup> November 2021.
- Mrs. N Suganthi, Dr. K.Sarojini, "A Study on Deep Convolution Neural Networks", International Conference on Computational Intelligence and Biological Seiences(ICCIBS), Sri Ramakrishna College of Arts & Science(Autonomous) Coimbatore,5<sup>th</sup> October 2023.

# Annexture – III

# List of Seminar / Workshop / Conference / Symposium Participated

- A UGC Sponsored two day National Seminar on "Current Trends in Communication Network" at SNR Sons College, Coimbatore on 10<sup>th</sup> and 11<sup>th</sup> June 2002.
- A UGC Sponsored Refresher Course in "Environmental Science (Interdisciplinary)" at Bharathiar University, Coimbatore on 21<sup>st</sup> October to 10<sup>th</sup> November 2003.
- <sup>2</sup>National Seminar on Recent Trends in Computing. Periyar University, Salem on 28<sup>th</sup> October 2006.
- Workshop on Mammogram Image Processing and Analysis", Periyar University, Salem on 28<sup>th</sup> November 2006.
- Workshop on "Data Mining using Rough Set Theory", Periyar University, Salem on March 2007.
- Workshop on Pattern Recognition", Periyar University, Salem on September 2007.
- Workshop on Mobile Computing, Periyar University, Salem on August 2008.
- Research workshop on Data Mining using Memetic Algorithms, Periyar University, Salem on November 2008.

- Workshop on "Open Source Tools and Data Mining Research", Dr. N.G.P. Arts and Science college, Coimbatore, August 2009.
- Workshop on "Multimedia Techniques", Sai Computing Education, SNR Sons College, Coimbatore, Jan 2010.
- Workshop on "PHP and MYSQL", Nimmies Education (I) Pvt. Ltd., SNR Sons College, Coimbatore, Oct 2010.
- Workshop on ORACLE 10G", RED Leaf Technologies, SNR Sons College, Coimbatore, Jan 2012.
- Workshop on "CISCO Networking", Redalis Network Technologies, SNR Sons College, Coimbatore, Feb 2012.
- Carrier Engineering Workshop on Android", SNR Sons College, Coimbatore, July 2012.
- Seminar on "J2EE Technology", Sai Computing Education", SNR Sons College, Coimbatore, July 2012.
- National Seminar on "Security Issues in Advanced Computing", NSSIAC'13, SNR Sons College, Coimbatore, 15<sup>th</sup> Feburary 2013.
- Workshop on "Ethical Hacking", Nimmis Education India Pvt. Ltd., March 2013.
- Attended FDP on "BIG DATA ANALYTICS" at PSG Arts & Science college on 9<sup>th</sup> & 10<sup>th</sup> September 2016
- Attended Workshop on "Intellectual Property Rights", held at KPR Institute of Engineering & Technology, Coimbatore on 17<sup>th</sup> March 2018.
- Participated in PYTHON 3.4.3 training Conducted by Hindustan College of Arts & Science in April 17<sup>th</sup> 2020 with course material of Spoken Tutorial Project, IIT, Bombay.
- Two days online FDP on "Design, Develop and Deliver online courses through MOODLE platform" conducted by TANSCHE on May 15 & 16 2020
- Attended National level FDP on "E-Learning and MOOCs in Higher Education and New Roles of Teachers" on 18<sup>th</sup> may 2020 organized by IQAC under UGC PARAMARSH Scheme
- FDP on 'R', Spoken Tutorial IIT Bombay on 23.6.20 to 29.6.20 organized by
- Attended Two weeks FDP on Advanced Optilmization Techniques and hands on with MATLAB/SCILAB, Ministry of Electronics and Information Technology, Govt. of India, 13.7.20 to 24.7.20.
- Attended "Principles of Management Faculty Development Programme", Panimalar Institute, CSI, IEEE Computer Society, 18.5.20 to 22.5.20
- Attended "16. Art of writing research paper", Goutam Budha University, Noida, UP, India, National webinar on 29.5.20.
- Attended Six day Online Training programme on MATLAB", Conducted by Digital Career and Entrepreneurship Hub Project of MHRD, Rusa Phase II, Bharathiar University during 10.03.2021 to 17.03.2021.
- Attended ML/DL using COLAB and Knime a road map", from 1<sup>st</sup> to 5<sup>th</sup> June 2021 by CMR Engineering College
- Attended FDP on "Advanced LATEX", Conducted by VeloreInstitute of Technology, June 27-29, 2022.
- Attended FDP on "Research trends in science and technology" at Hindusthan College on March 2023.