

**Government Arts college (Autonomous),  
Coimbatore –18  
Performance - Teacher Appraisal  
Report**



**i) General Information**

- a) Name : Dr. D. DEVAKUMARI
- b) Address (Residential) : 17-1, Periyar Nagar,  
Anna Nagar, Peelamedu,  
Coimbatore- 641004  
Mobile :9994498763
- c) Designation : Associate Professor
- d) Department : Information Technology
- e) Date of Birth : 10-01-1969
- f) Area of Specialization : Data Mining

**A) Academic Qualifications**

Examination passed	Board / university	Subject	Year	Division grade/merit etc.,
High School	Board of secondary Education	Tamil, English, Maths, Science, History & Geography	1984	I Class
Higher secondary or Pre-degree	Board of Higher secondary Education	Tamil, English, Maths, Science	1986	I Class
Bachelor's degree(s)	Bharathidasan University	B.Sc Computer Science	1989	I Class
Master's degree(s)	Bharathiar University	M.C.A	1992	I Class
Research degree(s)	Manonmaniam Sundaranar University	M.Phil., Computer Science	2003	I Class Commended
	Mother Teresa Women's University	Ph.D., Computer Science	2013	Commended

**ii) Research Experience & Training**

<b>Research stage</b>	<b>Title of thesis</b>	<b>University where the work was carried out.</b>
M.Phil.	Size and Delay based Scheduling with Differentiated Services to improve Response Time of Transient Load	Manonmaniam Sundaranar University
Ph.D.	Ranking and Relation based Search Strategies for Unsupervised Feature Selection	Mother Teresa Women's University
No of Publications	25 (List enclosed in Annexure I)	
Research guidance (give the names of students guided successfully)	List given in S.No IX (a & b)	
Training(please specify)	Underwent Soft Skills Training, LRG Govt. Arts College (W), Tiruppur	

**B) Research Projects carried out**

<b>S. No.</b>	<b>Title of the Project</b>	<b>Name of the Funding Agency</b>	<b>Duration</b>	<b>Remarks</b>
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**C) Seminars, Conferences, Symposia Workshops etc. attended**

<b>Name of the Seminars / Conferences / Symposia / Workshops etc</b>	<b>Name of the Sponsoring Agency</b>	<b>Place and Date</b>
	List enclosed in Annexure II	

**iii) Teaching Experience**

<b>Courses Taught</b>	<b>Name of University/ College/Institution</b>	<b>Duration</b>	
		<b>Period of employment From - To</b>	<b>Years of Experience</b>
<b>U.G.(B.A., / B.Sc., B.C.A etc.)</b>	1. S.N.R Sons College, Coimbatore	June 1998 to Dec 2007	9 Years 6 Months
	2. Government Colleges	Dec 2007 to Till Date	15 Years & Ongoing
<b>PG (M.A./M.Sc./MCA etc.)</b>	1. S.N.R Sons College, Coimbatore	June 1998 to Dec 2007	9 Years 6 Months
	2. Government Colleges	Dec 2007 to Till Date	15 Years & Ongoing
<b>M.Phil</b>	Bharathiar University	2013 to Till Date	9 Years
<b>Ph.D</b>	Bharathiar University	2016 to Till Date	7 Years

**Total Teaching Experience (in years and months) :**

a)	Under-graduate	25 Years
b)	Post-graduate	25 Years
c)	Research	9 Years

**iv) Innovations/ Contributions in Teaching**

a) Design of Curriculum :	Member of Board of Studies for UG and PG
b) Teaching methods :	Black Board, PPT Presentations, Seminars, Group Discussions
c) Laboratory experiments :	Preparing list of programs for UG and PG lab Subjects
d) Evaluation methods :	Internal Tests, Seminars, Assignments, Model lab tests etc.
e) Preparation of resource material including books, reading materials, laboratory manuals etc.:	Providing study materials, laboratory exercises, Project report format etc. Suggesting online links for further reference
f) Remedial Teaching / Student Counseling (academic) :	Remedial classes for slow learners Counseling to improve academic skills
g) Any other :	Creating awareness to Students on job opportunities

**v) Research Contribution****a). PhD/M.Phil undergoing scholars**

Sl. No	Name of the PhD/ M.Phil(PT/FT) Scholar	Name of the University	Broad Field	Registration Number	Year of registration
1	T. Angamuthu (PhD PT)	Bharathiar University	Data Mining	CRE/IT 22PNOV 1086/2022	2022
2	R. Rackymuthu (PhD PT)	Bharathiar University	Information Security	CRE/IT 22PNOV 1090/2022	2022

**b). PhD/M.Phil Awarded**

Sl.No	Name of the PhD/M.Phil (PT/FT) scholar	Name of the University	Title of the thesis	Year of registration of the scholar	Year of award of MPhil/PhD
1	K. Gayathri (Mphil PT)	Bharathiar University	An Effective Intruder Detection with Back Up Time Series Techniques in Wireless Sensor Network.	2013	04.12.2015
2	R. Komalavalli (Mphil PT)	Bharathiar University	Web Forums Crawler for Analysis of User Sentiments.	2013	04.12.2015

3	M. Shajithabegum (Mphil PT)	Bharathiar University	GINIX Generalized Inverted Index for Keyword Search.	2013	08.07.2016
4	S. Devika (Mphil FT)	Bharathiar University	Improved Data Sanitization Algorithm in Association Rule Mining.	2015	19.04.2017
5	K. Geetha (Mphil PT)	Bharathiar University	A Visual Crypt Stego Approach with Randomized Puzzle Block Generation for Highest Secret Sharing	2015	13.03.2018
6	B. Angelin (Mphil FT)	Bharathiar University	Comparative Analysis of K- Means and K- Median Algorithms for Outlier Detection.	2016	13.03.2018
7	T. Angamuthu (MPhil PT)	Bharathiar University	Predictiv Data Mining and Modified Kmeans (M-Kmeans) Algorithm for Rainfall Prediction	2017	2020
8	S. Shanthini (PhD FT)	Bharathiar University	A Hybrid Framework for Energy Efficient, Congestion Controlled and Trust Based Routing in MANETs	2016	2022
9	V. Punithavathi (PhD PT)	Bharathiar University	An Algorithmic Framework for Detection and Classification of Breast Lesions in Mammogram Images using Medical Image Processing with Data Mining Techniques	2016	2022

### X) Extension Work/ Community Service

25) Please give a short account of your contribution to:

i) Community work such as values of National integration, secularism, Democracy, socialism, humanism, Peace, scientific temper, flood or Drought relief, small family norms etc.	Motivating students to join NSS, NCC etc. Encouraging students to participate in flood, drought relief. Extended help during natural disasters in the form of money and material
ii) National Literacy Mission	Motivated students to continue their studies and created awareness on further studies
iii) Positions held/Leadership role played in organizations linked with Extension Work and National Service Scheme (NSS) or (NCC) or any other similar activity	---

### C. Participation in Corporate Life

Please give a short account your contribution to:

a) College/ University / Institution	UG and PG admission work, Internal exams, Semester exams etc.
b) Co-curricular Activities	Research work, Publishing research papers, Resource person in seminars (Annexure III) etc.
c) Enrichment of Campus Life (Hostels, sports, games, cultural activities)	Organizing department association functions, Conducting technical events for students (Annexure IV)
d) Students Welfare and Discipline	Monitoring students discipline within campus giving periodical counselling
e) Membership / Participation in Bodies	Subject expert in BOS of other colleges External examiner for Doctoral Committee meeting etc
f) Professional Organization of Teachers	-- --

D.(a) Membership of Professional Bodies, Societies, Editorship of Journals etc. -----

### E. Any other information

(Signature of the Teacher)

## ANNEXURE – I

### List of Publications

1. Dr. D. Devakumari, R. Komalavalli, “Web Forums Crawler for Analysis of User Sentiments”, International Research Journal of Engineering and Technology (IRJET), Volume 2 Issue 5, pp 1274 – 1282, August 2015.
2. Dr. D. Devakumari, K.Gayathri, “An Effective Intruder Detection with Backup Time Series Techniques in Wireless Network”, International Research Journal of Engineering and Technology (IRJET), Volume 2 Issue 5, pp 936 – 943, August 2015.
3. Dr. D. Devakumari, M. Shajitha Begum, “GINIX Generalized Inverted Index for Keyword Search”, International Research Journal of Engineering and Technology (IRJET), Volume 3 Issue 2, pp 424 – 431, February 2016.
4. Dr. D. Devakumari, S. Devika, “Comparison of Apriori algorithm and FP-Tree algorithm for Association Rule Mining”, Proceedings of 3<sup>rd</sup> International Conference on Computer Applications and Information Technology, ISBN 978-93-5212-746-7 (CAIT 2016), pp 110-118, March 2016.
5. Dr. D. Devakumari, S. Shanthini, “A Review on Adaptive Position Updation Techniques used for Geographical Routing in MANET” Proceeding of the National Conference on Challenges in Computational Research and Applications, ISBN: 978-93-86176-52-3 (NCCCRA-2017), PP 8-10
6. Dr. D. Devakumari, S. Devika, “Data Sanitization for Preserving Data Privacy”, International Journal of advanced Research in Computer Engineering & Technology, ISSN: 2278 – 1323 Voume 5, Issue 11, November 2016 PP 2617-2625.
7. Dr. D. Devakumari, K. Geetha, “A Survey of Visual Cryptographic method for secure data Transmission” International Journal of Advanced Research in Computer and Communication Engineering (IJARCCCE), ISSN (online) 2278-1021, ISSN (print) 2319-5940, Volume 6, Issue 6, June 2017 Impact Factor 5.947 PP 270-274.
8. Dr. D. Devakumari, B. Angelin, “ Outlier Detection using Clustering Algorithm A Survey” Published in International Journal of Advanced Information Science and Technology (IJAIST) Journal vol.6, No.10, October, 2017. ISSN: 2319-2682, PP 1-5.
9. Dr. D. Devakumari, B. Angelin, “ An Outlier Detection using K-median Clustering Algorithm” Published in International Journal of Advanced Information in Engineering and Technology (IJAIET) Journal vol.4, No.11, November, 2017. ISSN: 2454-6933, PP 5-8.
10. Dr. D. Devakumari, K. Geetha, “A Visual Crypt Stego Approach with Randomizes Puzzle Block Generation for Highest Secret Sharing” Journal of Network Communications and Emerging Technologies(JNCET), ISSN 2395-5317, Volume 7, Issue 11, November 2017 PP 44-47.
11. Dr. D. Devakumari, V. Punithavathi, “ Study of breast cancer detection method image processing with data mining techniques” International conference on advances in computer science, Engineering and technology (ICACSET’18), Kalasalingam academy of research and education, Date 19-20 Jan-2018.
12. Dr. D. Devakumari, S. Shanthini, “A Survey on Trust Based Energy Efficient Routing in Distributed on Demand Routing for MANETs” International Journal of Scientific Research in Computer Science Applications and Management Studies (IJSRCSAMS), ISSN 2319-1953, Volume 7, Issue 3 May 2018, PP 79.

13. Dr. D. Devakumari, S. Shanthini, "An Energy Efficient Technique in MANETs modified trust based route selection algorithm", *International Journal of Pure and Applied Mathematics*, ISSN 1314-3395, Volume 119, Issue 18 Sep 2018, PP 3215-3222.
14. Dr. D. Devakumari, V. Punithavathi, "Comparison of noise removal filters for breast cancer Detection in Mammogram images", *International Journal of Pure and Applied Mathematics*, ISSN 1314-3395, Volume 119, Issue 18 Sep 2018, PP 3863-3874.
15. V. Punithavathi and D. Devakumari "Survey On Image Segmentation Techniques in Mammogram Images", "*Journal of Applied Science and Computations (JASC)*", Volume 6, Issue 4 April 2019 with ISSN: 1076-5131, **UGC Approved Journal**.
16. V. Punithavathi and D. Devakumari "A Framework on Classification of Mammogram Images for Breast Cancer Detection Using Image Processing with Data Mining Techniques", "*International Journal of Creative Research Thoughts (IJCRT)*", Volume 8, Issue 2, February 2020 with ISSN: 2320-2882, **UGC Approved Journal**.
17. D. Devakumari and V. Punithavathi, "Noise Removal in Breast Cancer Using Hybrid Denoising Filter for Mammogram Images" in "*Computational Vision and Bio-Inspired Computing ICCVBIC 2019*", AISC 1108, pp.109-119, 2020, **Springer Nature**.
18. V. Punithavathi and D. Devakumari "Detection of Breast Lesion Using Improved GLCM Feature Based Extraction in Mammogram Images" in *Studies in Indian Place Names*, ISSN: 2394-3114 Volume 40, Issue 70, March 2020, **UGC Care Journal**
19. V. Punithavathi and D. Devakumari "A new proposal for the segmentation of breast lesion in mammogram images using optimized kernel fuzzy clustering algorithm" in *Materials Today: Proceedings*, 2021, **Elsevier**.
20. V. Punithavathi and D. Devakumari "A Hybrid Algorithm with Modified SVM and KNN for Classification of Mammogram Images using Medical Image Processing with Data Mining Techniques" in *European Journal of Molecular and Clinical Medicine*, ISSN 2515-8260 Volume 7, Issue 10, 2020, **SCOPUS**.
21. Dr. D. Devakumari, S. Shanthini, "Sealed-bid Auction based Energy Efficient Route Selection in Mobile Ad-hoc Network", *International Journal of Recent Technology and Engineering (IJRTE)*, ISSN: 2277-3878, Vol -8, Issue-3, September 2019, Page no: 7270-7273 [Scopus].
22. Dr. D. Devakumari, S. Shanthini, "Energy Efficient Congestion Control and Trust based Routing Techniques for MANET using Sealed Bid Auction Game Theory", *International Conference on Mobile Computing and Sustainable Informatics (ICMCSI 2020)* Springer, Tribhuvan University, Nepal. 23, 24 January 2020 [Scopus].
23. Dr. D. Devakumari, S. Shanthini, "RED Congestion Control with Energy Aware Auction Based Route Selection in MANET" *International Journal of Recent Technology and Engineering (IJRTE)*, ISSN: 2277-3878, Vol – 8, Issue-5, January 2020, PP 1970-1974 [Scopus].
24. Dr. D. Devakumari, S. Shanthini, "Review of Various Techniques on energy efficient, congestion control and trust based routing in MANET" *International Journal for Science and Advance Research in Technology*, ISSN: 2395-1052, Vol-6, Issue-2, February 2020, PP 21-25.
25. "Predictive Data Mining and Modified Kmeans for Rainfall Prediction", *International Journal for Science and Advance Research in Technology (IJSART)*, Volume 5, Issue 11, ISSN (Online): 2395-1052, Nov 2019, PP 185-189.



## **ANNEXURE II**

### **Seminars, Conferences, Symposia Workshops etc. attended**

1. Two Days Workshop on “Python Programming” organized by Post Graduate Department of Computer Applications, Government Arts College (Autonomous), Coimbatore, on 21<sup>st</sup> and 22<sup>nd</sup> February 2018
2. Two Days Training Programme on “Counselling and Communications Skills” conducted by Anna Institute of Management, Regional Centre, Salem, Sponsored by Personnel and Administrative Reforms (Trg. III) Department, Secretariat, Chennai
3. Online Five days Faculty Development Programme on “Moodle Learning Management System” organized by Mannar Thirumalai Naiker College, offered by the Spoken Tutorial Project, IIT Bombay, funded by the National Mission on Education through ICT, MHRD, Government of India
4. Online One week Faculty Development Programme on “R Programming” organized by Department of Information Technology, Sridevi Women’s Engineering College, Hydrabad, in association with Spoken Tutorial IIT Bombay
5. Online One day National Webinar entitled “ICT Enabled Higher Education in India” jointly organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of MHRD and Sanatan Dharma College, Abala Cantt
6. Online One week Faculty Development Programme on “Psychological Skills for Effective Teaching and Learning” organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education (PMMMNTT)

## **ANNEXURE III**

### **Resource Person in Seminars**

1. Delivered a Seminar on “Cyber Security” at P.K.R Arts College for Women, Gobichettipalayam in 26.08.2014
2. Delivered a Seminar on “Real Time Applications of Data Structures” at Sree Saraswathi Thyagaraja College, Pollachi in 06.01.2017
3. Delivered a Seminar on “Cyberbully Detection – An application of Opinion Mining” at Kongu Arts and Science College, Erode-638107 in 10.01.2019

## **ANNEXURE IV**

### **Seminars Organized**

1. Organized a Seminar on “Trends in Big Data Analytics” during the Inauguration of IT Department Association function on 29/03/22. Resource person was Dr. Mary Magdalene Jane, Dean, Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore
2. Organized a Seminar on “Adapting to Change” during the Valedictory function of IT Department Association on 04/06/2022. Resource person was Mr. P. Karuppusami, Senior Software Engineer, InTech Energy Inc., California