Dr.S.Sasikala B.E.,M.E.,Ph.D.
Associate Professor and Computer Science and Engineering
Velammal College of Engineering and Technology, Madurai
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Blog Address:-

Educational Qualification:

Degree obtained	Year	University/Institute	Any other details
Ph.D –C.S.E(I.C.E) (Full Time)	2016	Anna University, Chennai	Highly Commended
M.E –C.S.E	2008	Anna University, Chennai	First Class
B.E –C.S.E	2001	Madurai Kamaraj University	First Class

Experience in Years: 19 years

Employment History:

Position held	Employer	Date/s (From-To)
Associate Professor	Velammal College of Engineering and Technology, Madurai, India	05.08.2019 to till date (1 year 7 month)
Professor, Department of CSE	Paavai Engineering College (Autonomous), Pachal-637018, Namakkal District, Tamil Nadu.	9.6.2018 to 31.7.2019 (1 year 1 month)
Research cum Teaching (Associate Professor) Department of IT	K.L.N. College of Information Technology, Pottapalayam, Sivagangai District, Tamilnadu.	04.06.2011 to 02.08.2015 (4 years –Research Experience) 03.08.2015 to 31.5.2018 (2 years 10 months - Teaching)
Assistant Professor Department of CSE	Velammal College of Engineering and Technology, Madurai, India	06.10.2008 to 02.05.2011 (2 years 5 months)
Senior Lecturer, Department of CSE	Sethu Institute of Technology, Kariapatti, Madurai	27.08.2003 to 04.09.2008 (5 years 1 months)
Lecturer Department of IT	P.S.N.A Engineering College, Dindigul, India.	19.06.2002 to 25.08.2003 (1 year 2 months)
Lecturer Department of MCA	Virudhunagar Hindu Nadar's Senthikumar Nadar College, Virudhunagar.	06.08.2001 to 31.05.2002 (10 months)

Interested Research Areas:

Data Mining, Big Data Analytics, Soft Computing, Data Science, Image Processing and Internet of Things

Scholarships and Awards received:

(Anna University Supervisor NewRef.No:2840109)

Details of scholar pursing Ph.D:

S.No	Supervisor Name	Scholar Name	Register Number	Year of Registration	University	Status
1.	Dr.S.Sasikala Ref.No: 2840109	Mrs.N.Gajalakshmi	18244791109	JAN 2018	Anna University	Course Work
		Mr.A.S. Karthik Kannan	17144797677	JUL 2017	Anna University	Thesis Submitted
		Mr.E.S.Vinoth Kumar	1414479168	JAN 2014	Anna University	Confirmation completed
		Mr.J.Senthil Kumar	1514479102	JAN 2015	Anna University	Confirmation completed
		Mrs.P.Prabharani	16244797267	JUL 2016	Anna University	Confirmation completed
		Ms.K.R.Saranya	17224791464	JAN 2017	Anna University	Synopsis completed
		Ms. J.Shanthalakshmi Revathy	17224797389	JUL 2017	Anna University	Confirmation completed
		Mrs.R.T.Subhalakshmi	17244797396	JUL 2017	Anna University	Confirmation completed

Funded Research Projects: (Applied)

Funding Agency: AICTE

Scheme: Research Promotion Scheme (RPS)

Title: Deep Learning Approaches for Clinical Decision Making on Lung Diseases for COVID-19 prediction.

Applied for Amount Rs. 13,26,000

Year: 2021

Principal Investigator(PI):Dr.P.Alli

Co-PI:Dr.S.Sasikala & Dr.G.Vinoth chakkaravarhty

Patent rights received:

1. **Filed Indian Patent,** entitled "Global System for Mobile Communication (GSM)", Official Journal of The Patent Office, (**Application No.**201941038317 A, Filing Date: 23.09. 2019).
2. **Filed Australian Patent** entitled "Automated Enhanced E-Learning System for Engineering Students using IoT" (**Application No.**2020104354, Filing Date: 27-12-2020).
3. **Filed Indian Patent,** entitled "Joint Pain Treatment System: Joint Pain Treatment and Notification using Doctors Experience And IoT-based System", Official Journal of The Patent Office, (**Application No.**202041057132, Filing Date: 30.12.2020).
4. **Filed Australian Patent** entiltled"A Method for Malware Detection and Classification using Multi-Level RESNET Paradigm on PEbinary Images (**Application No.**2021100392, Filing Date :22-01-2021).

Publications Details:

1. Patent Journal Publication Details:

1. Dr.Sasikala, "Global System for Mobile Communication (GSM)", Official Journal of The Patent Office,,2019.
2. Dr.Sasikala, "Joint Pain Treatment System: Joint Pain Treatment and Notification using Doctors Experience And IoT-based System", Official Journal of The Patent Office,2020.

2. International Journal Publication Details:

1. Dr.S.Sasikala, "Statistical and Machine Learning Approaches for Clinical Decision on Drug Usage in Diabetes with Reference to Competence and Safeness", International Journal of Computational Intelligence Systems, Vol.14(1),pp.859–868,2021.**[Science Citation Index].**
   DOI: https://doi.org/10.2991/ijcis.d.210212.002; ISSN: 1875-6891; eISSN: 1875-6883.

2. Dr.S.Sasikala, "An Efficient Food Quality Analysis Model (EFQAM) using the Internet of Things (IoT) Technologies", Microprocessors and Microsystems, **Elsevier,** 2021. [Preprint Available Online 15th Jan'2021]**[Science Citation Index].**

3. Dr.S.Sasikala, "Multi‑ parameter optimization for load balancing with effective task scheduling and resource sharing", Journal of Ambient Intelligence and Humanized Computing, **Springer.** https://doi.org/10.1007/s12652-021-03005-2, published online 30.03.2021.**[Science Citation Index].**

4. Dr.S.Sasikala, "Feature Selection Methods: A Survey For Effective Data Classification", International Journal of Recent Scientific Research, Vol. 11, Issue, 11 (A), pp. 40000-40007, November, 2020. International Journal of Recent Scientific Research, Vol. 11, Issue, 11 (A), pp. 40000-40007, November, 2020 **[Scopus citied].**
DOI: http://dx.doi.org/10.24327/ijrsr.2020.1111.5605

5. Dr.S.Sasikala, "A Model for Predicting Human Depression using Machine Learning Algorithm", International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-3S/ PP. 402-406, 2020.**[Scopus citied].**
 DOI: 10.35940/ijitee.C1086.0193S20

6. Dr.S.Sasikala , "A Novel Software Package Selection Method using Teaching Learning Based Optimization and Multiple Criteria Decision Making", IEEE Transactions on Engineering Management", June 2019. [I.F- 1.4, **Science Citation Index- IEEE Transaction publication].**

7. Dr.S.Sasikala, "A Secure Cloud-Based Heterogeneous Network using A Novel Routing Protocol For Smart Military Applications" International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-6, April 2019.[**Scopus citied].**

8. Dr.S.Sasikala "Ample Feature Selection Algorithm for Efficient prediction of main causes of Aviation accident using Tree based classifiers" International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-8 Issue-5, March 2019. **[Scopus citied].**

9. Dr.S.Sasikala "Data mining application on aviation accident data for predicting Top most causes for accidents" Cluster Computing, Springer, pp. 1-23. November 2017.
    [I.F- 2.01, Science Citation Index- Springer publication]
     https://doi.org/10.1007/s10586-017-1394-2.

10. Dr.S.Sasikala "A novel adaptive feature selector for supervised classification", Information Processing Letters, Vol.117, no.1, pp.25-34, January 2017. [I.F- 0.697, **Science Citation Index- Elsevier publication].**
http://dx.doi.org/10.1016/j.ipl.2016.08.003.

11. Dr.S.Sasikala "A Novel Memetic Algorithm for Discovering Knowledge in Binary and Multi Class Predictions based on Support Vector Machine", Applied Soft Computing, Vol.49,no.1,pp.407-422,December 2016. **[I.F- 2.857, Science Citation Index- Elsevier publication]** http://dx.doi.org/10.1016/j.asoc.2016.08.038.

12. Dr.S.Sasikala 'Multi Filtration Feature Selection (MFFS) to improve discriminatory ability in clinical data set', Applied Computing and Informatics, Vol.12, no.2, pp.117-127, July 2016. [**Scopus- Elsevier publication]**
http://dx.doi.org/10.1016/j.aci.2014.03.002.

13. Dr.S.Sasikala 'Improving detection performance of Artificial Neural Network by Shapley Value Embedded Genetic feature selector' Neural Network World , Vol.26,no.2,pp.175-201, January 2016. [IF-0.562, **Science Citation Index- Elsevier publication]** http://doi/10.14311/NNW.2016.26.010.

14. S.Sasikala,"Improving Detection Performance of Classifiers with Shapley Ensemble based Feature Selector" published in Pensee – Multidisciplinary Journal, Volume 76, Issue 5 , pp.283-294,May 2014 (Impact Factor –0.063,ISSN : 0031-4773).

15. S.Sasikala, "Performance Tuning of PCA by CFS-Shapley ensemble and its application to Medical Diagnosis" Published in PReMI 2013, Lecture Notes in Computer science (LNCS) 8251, pp. 53–59, © **Springer-Verlag Berlin Heidelberg 2013.[Scopus citied]**

16. S.Sasikala,"A Survey on Predictive Data Mining Approaches for Medical Informatics", published in International Journal of Scientific and Engineering Research (IJSER) Volume 3, Issue 9, September 2012 (ISSN 2229-5518). (Impact factor –1.4)

3. **International Conference Presentation Details:**

1. Dr.S.Sasikala , "Empirical study on Data mining algorithm for Dengue Disease Prediction", International Conference on Veracity Research in Scientific Computation and Engineering Trends (ICVRSCET 2019)" organized by V.R.S.College of Engineering and Technology, Villupuram District, Tamil Nadu India ,23rd March 2019.

2. S.Sasikala (2018) "The Future of India Creeping Up in Building a Smart City: Intelligent Traffic Analysis Platform", 2nd International Conference on Inventive Communication and Computational Technologies, Coimbatore, India, on 21-22 April 2018.

3. S.Sasikala (2018) "A Survey on Water Quality Assessment Using Internet of Things" published in 3rd International Conference on Emerging Trends In Computing, Communication & Automation Technology (ICETCCAT- 2018)*,* Sri Vidya college of Engineering & Technology, Virudhunagar on 1st March 2018.

4. S.Sasikala (2017) "Generation of Cancelable Iris Template Using Bi-level Transformation" published in International Conference on Biometric and Forensic Engineering (ICBFE 2017), organized by **National University of Singapore, Singapore**, on June 22-24, 2017.

5. S.Sasikala (2017) "Comparative Analysis of Image using Various Filtering Techniques", International conference on Recent Research in Applied Engineering and Technology (ICRRAET'17), organized by Vedavyasa Institute of Technology, Kerala, 12th May 2017.

6. S.Sasikala (2017) "Water Quantity Management and Drip Irrigation using IoT Environment", International conference on Recent Research in Applied Engineering and Technology (ICRRAET'17), organized by Vedavyasa Institute of Technology, Kerala, 12th May 2017.

7. S.Sasikala (2016) "Modeling of RDH Scheme Using Interpolation" published in First International Conference on Science, Engineering and Computer Technology-IConSect 2016, organized by World Academic and Scientific Researchers Organization and **Vedavyasa Institute of Technology, Kerala**, India on 30th April 2016.

8. S.Sasikala, Appavu alias Balamurugan, S.Geetha (2015)"Recommendation for Promoting Cross-Border Students in Higher Education through Data Mining –A

Review" published in International Conference on Design and Application of Structures, Drives Communicational and Computing Systems organized by K.L.N.C.I.T, Madurai on 27th and 28th Nov' 2015.

9. S.Sasikala,S.Appavu alias Balamurugan, S.Geetha(2015) "A Novel Feature Selection Technique for Improved Survivability Diagnosis of Breast Cancer" published in 2nd International Symposium on Big Data and Cloud Computing (ISBCC'15) March 2015 organized by **Vellore Institute of Technology (VIT Chennai Campus),**Chennai (Elsevier Proceedia).

10. S.Sasikala, S.Appavu alias Balamurugan, S.Geetha (2013) "Performance Tuning of PCA by CFS-Shapley ensemble and its application to Medical Diagnosis" published in Fifth International Conference on Pattern Recognition and Machine Intelligence (PReMI'13) 10-14 December 2013 organized by **Machine Intelligence Unit, Indian Statistical Institute, Kolkata, India. (Springer).**

11. S.Sasikala,S.Appavu alias Balamurugan (2013) "Improved NSGA II for the Multi Objective Optimization with class prediction" published in Second International conference on Design and Application of Structures, Drives, Communicational and Computing Systems (ICDASDC -2013) organized by K.L.N.C.I.T ,Madurai on 29th and 30th November 2013.

12. S.Sasikala, A.B.Arockia Christopher, S.Geetha, S.Appavu alias Balamurugan, (2013) "A Predictive Model using Improved Normalized Point Wise Mutual information –INPMI" published in IEEE ICT and Knowledge Engineering (ICTKE-2013) held on November 20-22, 2013 at **Siam University, Bangkok, Thailand**. (IEEE Explorer).

13. S.Sasikala, S.Appavu alias Balamurugan, S.Geetha (2013) "A Hybridized PCA-CFS Approach of Dimension Reduction for Medical Data" published in Indian conference on "Research Ideas in Software Engineering and Security (RISES - 2013)" held on 19th and 20th August 2013 at **Thiagarajar College of Engineering, Madurai**.

14. S.Sasikala,S.Appavu alias Balamurugan, S.Geetha(2013) "Comparing the Dimensionality Reduction Methods in Bio-Medical Domain" published in International Conference on Emerging Research in Computing, Information, Communication and Applications" - ERCICA 2013 to be held at **NITTE**

Meenakshi Institute of Technology (NMIT), Bangalore on 2nd and 3rd August ,2013.(Elsevier Proceedings).

15. S.Sasikala, S.Appavu alias Balamurugan, S.Geetha(2013) "An Efficient Feature Selection Paradigm Using PCA-CFS-Shapley Values Ensemble Applied to Small Medical Data Sets" published in International Conference on Computing Communication and Networking Technologies" - ICCCNT 2013,at Vivekananda College of Engineering for Women, Tiruchengode on 4th to 6th July 2013.(IEEE Explorer).

16. S.Sasikala,S.Appavu alias Balamurugan, S.Geetha(2013) "RF-SEA based Feature selection for Data classification in Medical domain", published in International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2013) to be held at **Central Institute of Technology, Raipur, Chattisgarh - 493661**, India during June 12-14, 2013.(Springer).

17. S.Sasikala, Dr.Appavu alias Balamurugan(2013) "Data classification using PCA based on Effective Variance Coverage (EVC)",published in 2013 IEEE International Conference on Emerging Trends in Computing ,Communication and Nanotechnology (ICECCN 2013) organized by Infant Jesus College of Engineering and Technology , Tuticorin, Tamilnadu, India on 25th and 26th March 2013. (IEEE Explorer).

18. S.Sasikala, Dr.Appavu alias Balamurugan, S.paramala (2012) "An Efficient Detection of Erythemato-squamous diseases using FE-FS Approach" published in International conference on Design and Application of Structures, Drives, Communicational and Computing Systems" organized by K.L.N.C.I.T , Madurai on 21st and 22nd December 2012.

19. S.Sasikala, Dr.Appavu alias Balamurugan(2012) "The Role of Ranking and Re-Ranking Feature Selector for Effective Diagnosis of Cardiac Arrhythmia Disease" ,published in International conference on Design and Application of Structures ,Drives, Communicational and Computing Systems organized by K.L.N.C.I.T ,Madurai on 21st and 22nd December 2012.

4. **National Conference Presentation Details:**

1. S.Sasikala (2020) "Machine Learning Based Prediction of Depression among individuals in workplace"in Research Support Conclave ,Coimbatore Institute of Technology-Teaching Learning Centre,Coimbatore,from 8th to 10th January 2020.

2. S.Sasikala (2017) "Optimal Route Planning using Particle Swarm Optimization's Exploration Technique" in Proceedings of National Conference on Recent Trends in Engineering and Information Technology" RTEIT'17 21st MARCH 2017, K.L.N.College of Information Technology, Pottapalayam, Sivagangai.

3. S.Sasikala (2017) "Recommendation System for Version Based Mobile Application" in Proceedings of National Conference on Recent Trends in Engineering and Information Technology" RTEIT'17 21st MARCH 2017, K.L.N.College of Information Technology, Pottapalayam, Sivagangai.

4. S.Sasikala (2017) "Optimal cost selection using Artificial Bee Colony optimization Technique" in Proceedings of National Conference on Recent Trends in Engineering and Information Technology" RTEIT'17 21st MARCH 2017, K.L.N.College of Information Technology, Pottapalayam, Sivagangai.

5. S.Sasikala (2017) "Medical Image Processing using Segmentation Techniques" in Proceedings of National Conference on Recent Trends in Engineering and Information Technology" RTEIT'17 21st MARCH 2017, K.L.N.College of Information Technology, Pottapalayam, Sivagangai.

6. S.Sasikala (2016) "Background Verification System" in Proceedings of National Conference on Social, Mobile, Cloud, Analytics and Internet of Things (NCSMCAIT'16), Organized by K.L.N.C.I.T, Madurai on 23rd March 2016.

7. S.Sasikala (2016) "Forecasting and Evaluating Water Quality of South Tamil Nadu based on Data Mining Approach" in Proceedings of National Conference on Social, Mobile, Cloud, Analytics and Internet of Things (NCSMCAIT'16), Organized by K.L.N.C.I.T, Madurai on 23rd March 2016.

8. S.Sasikala, I.Sabarees, P.K.A. Chitra, (2010) "Protein Solvent Accessibility Prediction Using Neural Network" in Proceedings of National Conference on Computer & Communication, Organized by Sethu Institute of Technology, Kariapatti.

9. S.Sasikala, K.Sivagama Sundari and Malathi, (2009) "Effective Utilization of Bandwidth in a broad cast with Noise and Artifact Reduction: A pre and post Compression Processing" in Proceedings of National Conference NCACN'09, Organized by Avinasilingam University, Coimbatore.

10. S.Sasikala ,P.Chitra (2008) "Multi Objective Genetic Algorithms: Classification of Two Class Problems using Evolutionary Algorithms-NSGA II" in Proceedings of Second National Conference on Advanced Telecommunication Technologies 2008, Organized by KLN College of Engineering and Technology, Madurai.

11. S.Sasikala, P.Chitra (2008) "Applying MOEA on Bio-Informatics Data Classification –NSGA –II Approach" in Proceedings of Second National Conference on Computer Technology – MEPCONCT'08 Organized by Mepco Schlenk Engineering College , Sivakasi.

5. **Books Published:**

1. Published book on "Hospital Management" Technical Publications, June 2020.
2. Published book entitled "Data is warehousing and Data Mining" as per Anna University 2013 Regulations, WASRO Publishing, India, 2016.
3. Published book entitled "DIMENSIONALITY REDUCTION FOR SMALL, MEDIUM AND LARGE SCALE DATA –A Quick Reference" Lambert Academic Publishing, Germany, 2012.

6. **Book Chapters Published:**
1. Book Chapter entitled "A New Algorithm for Enlarging Text for Individuals Suffering From Low Vision" in "Emerging Trends in Engineering Research and Technology",Vol.3, pages 1-12,September 2020,Book Publisher International.[Published 8th June 2020],
DOI: https://doi.org/10.9734/bpi/etert/v3, Print ISBN: 978-93-90149-55-1, eBook ISBN: 978- 93-90149-00-1.
2. Book Chapter entitled "Artificial Intelligence, Machine Learning and Deep Learning" in "Deep Learning Applications in Medical Imaging" IGI Global eEditorial Discovery. pages 178-208, DOI: 10.4018/978-1-7998-5071-7.ch008, ISBN13: 9781799850717, Release Date: October, 2020.

Google Scholar report: