Name	Dr.B.MAHALAKSHI	MI		
Department & Designation	CSE (CYBER SECURITY) & PROFESSOR			
Qualification	B.E., M.E., Ph.D.			
Area of Specialization	SOFT COMPUTING APPLICATIONS			
Date of Joining (KSR IET)	17-06-2023			
<b>Experience</b> (as on 01.07.2023)	Teaching: 25 Years 11 months	Industry:03	Other	s: 00
Number of Papers Published	National Journals	01 Internat	ional J	ournals 21
Number of Papers Presented	National Conferences: 16			
Number of patents	Published: 01			
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### **Publications (International Journals)**

- 1. **Mahalakshmi.B**, Duraiswamy.K , "LSI approach for web document categorization based on 1DSOM", International journal of artificial intelligence and computational research, Vol. 2, No.1, pp. 65-71, 2010.
- 2. **Mahalakshmi.B**, Duraiswamy.K and Tintu Paul, "Improving the efficiency of text categorization by SOM", International journal of computer network and security, Vol. 1, No. 3, pp. 1-6, 2010.
- 3. **Mahalakshmi.B**, Duraiswamy.K, "Efficient categorization of web documents using enhanced self-organizing map", European Journal of Scientific Research, Vol. 77, No. 2, pp.231-239, 2012.
- 4. **Mahalakshmi.B**, Duraiswamy.K , "An Overview of Categorization techniques", International Journal of Modern Engineering Research (IJMER), Vol.2, No.5, pp.3131-3137, 2012.
- 5. **Mahalakshmi.B**, Duraiswamy.K, "Clustering of noise data by self-organizing map". Pollution Research, Vol.32, No.4, pp.793-796, 2013.
- **6. Mahalakshmi.B**, Duraiswamy.K, Chandru.K, "Online Clustering using K-Means and SOM", International Journal of Advanced and Innovative Research, Vol.2, No.11, pp.449-451, 2013.
- 7. **Mahalakshmi.B**, Duraiswamy.K, Gnanasuganya.P, Aruldhevi.P, Sundarapandiyan.R, "Face Verification across ages using Self-organizing Map", International Journal of Innovative Research in Computer and Communication Engineering, Vol. 2, No.1, pp. 1482-1486, 2014.

- 8. Sabarinathan K.M, **Mahalakshmi B**, Shoba S, Vidhya P.G, Siva K, Dhanesh Kumar G, Natarajan Vijayarangan, "Identification of Tooth Decay in Panoramic X-ray using Image Processing", Australian Journal of Basic and Applied Sciences, Vol.9, No.6, pp.60-64, 2015.
- Mahalakshmi B, Sabarinathan K.M, Shoba S, Vidhya P.G, Siva K, Dhanesh Kumar G, Natarajan Vijayarangan, "Identification of Tooth Decay in Panoramic X-ray using Image Processing", WIT Transactions on Information and Communication Technologies - ISBCC, 2014.
- 10. **Mahalakshmi B**, Kalaichelvi S, "Elder People Health Care: A Survey", International Journal of Modern Trends in Engineering and Science, Vol. 2, No. 8, pp. 10-15, 2015.
- 11. **Mahalakshmi B**, Keerthika K, "Effective Generation of Location-Sensitive Recommendations in Social Network Environments using Enhanced SSU Approach", International Journal of Advanced Research in Management, Architecture, Technology and Engineering(IJARMATE), pp. 207-213, 2016.
- 12. **Mahalakshmi.B**, Saranya.S, "Recommendations based on User-Shared Images in Social Graph using Big Data", International Journal of Advanced Research Trends in Engineering and Technology (IJARTET), Vol.3, No.20, pp. 325-328, 2016.
- 13. **Mahalakshmi.B**, Hemapriyadharshini. R, Divyadharshini. G, Ganavel. S, "Parallel and Multiple Data Distributed Process using Concurrent Progressive Duplicate Detection", International Journal of Engineering Science and Computing, Vol.7, No.3, pp. 5043-5053, 2017.
- 14. **Mahalakshmi B**, Saranya S, Suganya S, Valliammai A L, "Comprehensive Analysis of Large Text Document", International Journal of Advanced Research in Management, Architecture, Technology and Engineering(IJARMATE), Vol. 3, No. 2, pp. 40-51, 2017.
- 15. **Mahalakshmi B**, Nandhini A T, "Efficient Frequent Pattern Searching using Amoeba and Decision Tree Technique", International Journal of Pure and Applied Mathematics, Vol. 119, No. 10, pp. 1921-1926, 2018.
- 16. Priyadharshni V, Sarumathi S, Suruthi M, **Mahalakshmi B**, "Spatio temporal and aspect features based sentiment analysis on customer reviews", International Journal of Intellectual Advancements and Research in Engineering Computations, Vol.6, No.2, pp.1816-1820, 2018.
- 17. Bharanidharan K, Kannan V, Karthick V and **Mahalashmi B**, "Crop Prediction using Machine Learning Algorithm", International Journal of Scientific Research and Review, Vol. 06, No. 03, pp. 445-449, 2019.
- 18. Sreehari R, **Mahalakshmi B**, "Plant Disease Detection using Machine Learning", International Educational Applied Research Journal (IEARJ), Vol.04, No.04, 2020.
- 19. Arun Kumar T and **Mahalakshmi B**, "Master Data Management", International Educational Applied Research Journal (IEARJ), Vol.04, No.04, pp. 52-55, 2020.
- 20. Naveen Kumar B and **Mahalakshmi B**, "Video quality adoption to limit energy and Data usage in mobile and desktop systems", International Journal of Advanced Science and Engineering Research, Vol. 5, No. 1, pp.613-620, 2020.
- 21. Kaviya and **Mahalakshmi B**, "Cloud Based Pantry Tracking system using IoT and Android Application", International Journal of All Research Education and Scientific Methods, Vol. 9, No. 5, pp. 441-418, 2021.

### **Publications (National Journals)**

1. **B.Mahalakshmi,** S.Kalaichelvi, "Web Mining and Neural Networks" National Journal of Advanced Research in Computer Networking, Wireless and Mobile Communications, Vol. 1, No.1, pp. 45-54, 2014.

### **Publications (International Conferences)**

- 1. Paper titled "Self-organising map for document categorization using latent semantic analysis" Proceedings of the International conference on "Innovative Computing Technologies (MKCE ICICT-2010)", IEEE Xplore 12th and 13th February 2010, M.Kumarasamy Engineering College, Karur.
- 2. Paper titled "Latent Semantic Approach for Web Document Categorization based on One-dimensional Self-Organizing Map" Proceedings of the First International conference on "VLSI, Communication, Computation and Security(ICVCCS'10)", 9th and 10th April 2010, Karunya university, Coimbatore, TN, pp. 333-339
- 3. Paper titled "Improving the efficiency of text categorization by SOM" Proceedings of the International conference on "Information Science and Applications(ICISA 2010)", 6th February 2010, Panimalar engineering college, Chennai, TN, India. ISBN 978-81-90767, pp. 210-215
- 4. Proceedings of the 5th International Conference on "Intelligent Systems and Control (ISCO 2011)", 7th & 8th February 2011.
- 5. Proceedings of the International Conference on "Recent advances in technology, engineering, management and science (ICRATEMS-2011), 4-6 March 2011.
- 6. Paper titled "Image categorization using enhanced tree-structured self-organizing maps", First International conference on Advances in communication and computing,ICACC-2012, 9-10 January 2012, Tejaa Shakthi Institute of technology for women, coimbatore.
- 7. Paper titled "Clustering of images using latent semantic indexing", International conference on Computational intelligence and its applications, ICCIA-12, March 1-3, 2012, Vivekananda institute of engineering and technology for women, Tiruchengode
- 8. Paper titled "Clustering of web content using efficient and effective neural network", International conference on "Emerging marvels in information and computer science engineering", EMICS 2013, 15th and 16th February 2013, Maria college of engineering and technology, Kanyakumari.
- 9. Paper titled "Online Clustering using K-Means and SOM" International Conference on Advances in Computer Science and Information Technology, ACSIT, ISBN: 978-81-924031-3-7
- 10. Paper titled "Face Verification across ages using Self-organizing Map", Proceedings of International conference on Global Innovations in Computing Technology (ICGICT'14), JayShriram Group of Institutions, Tirupur, TN. 6th and 7th March 2014.
- 11. Paper titled "Identification of Tooth Decay in Panoramic X-ray Using Image processing", 1st International Symposium on Big Data and Cloud Computing Challenges ISBCC-2014 (Sponsored by BRNS and ASDF) March 27-28, 2014 at VIT University, Chennai, India

- 12. Paper titled "Clustering the Web Usage Patterns of Elder self care by SOM", IEEE Second International Conference on Innovations in Information Embedded and Communication Systems ICIIECS'15, 19&20 March 2015, pp.181-186
- 13. Paper titled "Identification of Tooth Decay in Panoramic X-ray Using Image processing", IEEE Norbert Wiener in the 21st Century Conference, Boston, 154 [Student paper], Student Track, 25th June 2015.
- 14. Paper titled "Water Marking of Fingerprint using GEP and SVD method", International Conference on Engineering Trends and Science & Humanities (ICETSH-2015), Seventh Sense Research Group with Imayam College of Engineering, Trichy, 30th March 2015, pp. 69-75
- 15. Paper titled "Text Acquisition through Image Transition" International Conference on Energy, Environment & Engineering ICEEE-2016, Coimbatore Institute of Technology, Coimbatore, March 1 & 2, 2016.
- 16. Paper titled "Effective Generation of Location-Sensitive Recommendations in Social Network Environments using Enhanced SSU Approach", International Conference on Emerging Enhancement in Engineering and Technology ICEEET'16, Trichy, March 18-19, 2016, pp. 69-75, ISBN: 978-93-5254-672-5.
- 17. Paper titled "Recommendations based on User-Shared Images in Social Graph using Big Data", International Conference on Innovations in Computer Science & Technology (ICICST-2016), Dept. of CSE, Alagappa University, Karaikudi, April 4-5. 2016, pp. 100-103, ISBN: 978-81-920462-8-0
- 18. Paper titled "Comprehensive Analysis of Large Text Document", 3rd International Conference on Computing, Communication and Automation (ICCCA'17), Indra Ganesan College of Engineering, Tiruchirappalli, 7th & 8th April 2017.
- 19. Paper titled "Spatio Temporal and Aspect Features Based Sentiment Analaysis on Customer Reviews", International Conference on Recent innovations in engineering, technology and management, Nandha Engineering College, Erode, 23rd March, 2018.
- 20. Paper titled "Crop Prediction using Machine Learning Algorithm", Second International Conference on Nexgen Technologies, Sengunthar Engineering College, Tiruchengode, 8 & 9 March 2019, pp.900-904, ISBN: 978-93-87793-75-0.
- 21. Paper titled "Video Quality Adoption to Limit Energy and Data Usage in Mobile and Desktop Systems", 9th International Conference on Advanced Science and Engineering Research 2020 (ASER 2020), Al-Ameen Engineering College, Erode, March, 2020.
- 22. Paper titled "IoT based Smart Pantry System", 10th International Conference on Advanced Science and Engineering Research 2021, Al-Ameen Engineering College, Erode, March 2021.
- 23. Paper titled "Prediction of Crop Yield using ANFIS Model" Proceedings of the DST-SERB Sponsored Second International Conference on Signal Processing and Communication Systems (ICSPCS 2023), M.Kumarasamy College of Engineering, Karur, March 07th, 2023
- 24. Paper titled "COVID-19 Future Forecasting using Supervised Machine Learning Models", First International Conference on Artificial Intelligence and Block Chain (ICAIBC-2023), Bannari Amman Institute of Technology, Sathyamangalam, January 2023.

25. Paper titled "Agricultural Crop and Fertilizer Recommendations based on Various Parameters", International Conference on Sustainable Computing and Smart Systems (ICSCSS-2023), IEEE Xplore, ISBN: 979-8-3503-3360-2, Hindusthan College of Engineering and Technology, Coimbatore, June 2023.

#### **Publications (National Conferences)**

- 1. Proceedings of the First National Conference on "Innovations in Computing Techniques", 3rd April 2006.
- 2. Proceedings of the Second National Conference on "Recent Trends in Advanced Computing", 6th October 2006.
- 3. Proceedings of the Second National Conference on "Innovations in Computing Techniques", 16th March 2007.
- 4. Proceedings of the National Conference on "Emerging Trends in Advanced Computing", 21st February 2008.
- 5. Proceedings of the National Conference on "Current Trends in Computer Applications", 27th February 2008.
- 6. Proceedings of the National Conference on "Erudite", 2008.
- 7. Paper titled "Web content management by using topological organization based ontology and latent semantic analysis", Proceedings of the National Conference on "Computing Technology", 25th May 2009. Sengunthar engineering college, Tiruchengode.
- 8. Proceedings of the National Conference on "Recent Trends in Advanced Computing", 6th October 2009.
- 9. Proceedings of the National Conference on "Recent Trends in Advanced Computing", 3rd October 2011.
- 10. Proceedings of the First National conference on "Innovation and invention in communication and computing", March 12, 2012, Kalaivani college of technology, Coimbatore.
- 11. Proceedings of the National conference on "Recent trends in information, communication & VLSI", Feb 2, 2013, Maharaja Engineering College for Women, Perundurai.
- 12. Proceedings of the National conference on "Recent trends in electrical sciences and technology", February 15, 2013, IET-SSIET Student Chapter, Sree Sastha Institute of Engg. and Tech., Chennai
- 13. Proceedings of the National conference on "Innovations in Information Technology", February 21&22, 2013, DRDO, New Delhi, Bannari Amman Institute of Technology, Sathyamangalam
- 14. Proceedings of the Conference on "Computational Intelligence and Information Technology", CCIIT2K13, 6th May, 2013, Info institute of engineering, Coimbatore.
- 15. Paper titled "Web Mining and Neural Networks" Proceedings of the National Conference on Futuristic Innovations in Engineering (NCFIE-14), 29th March 2014, Arulmurugan College of Engineering, Thennilai, Karur.

16. Paper titled "Enhancing Pruning of Pattern & Retrieval of Highly Qualified Patterns with Large Area Coverage using Efficient Techniques", National Conference on Computational Intelligence, Security & Systems, Sona College of Technology, Salem, 7<sup>th</sup> April 2017.

# Books /Instruction materials/monograms published

S.No	Title of the Book	Author(s)	Name & Address of the Publisher	Year of Publishing
1.	Best practices – Student engagement	Dr.B.Mahalakshmi	ICT Academy	2018

## Funded Programmes Organized (Seminar/Conference/Workshop/FDP/STTP/Other)

S. No.	Date		Topic / Title	Funding agency and Amount Sanctioned
	From	То		
1.	04.01.2021	08.01.2021	FDP on Quantum Computing	AICTE ATAL, 98,000 /-

## **Training Undergone**

S.No	Program Title	Name of the organizer	Date(s)
1.	Training on "IoT and SCADA Penetration testing"	Coimbatore Institute of Technology in association with ISAC	1.7.2023 to 3.7.2023
2.	Faculty Enablement Programme on "Database Management System through INFYTQ Platform"	Infosys Limited	3.8.2020 to 7.8.2020
3.	Ebox Faculty Industrial Training on "SQL"	Amphisoft Technologies, Coimbatore	17.6.2019 to 21.6.2019
4.	Google Apps training	K.S.Rangasamy College of Technology, Tiruchengode	6.11.2013

5.	WIPRO Mission10x	WIPRO at KSRCT,	1.2.2011 to
		Tiruchengode	5.2.2011

### Membership in Professional Bodies

• Indian Society for Technical Education (ISTE) - Life Member (LM)

#### Awards/Recognition:

- Best Professional Body Award 2022
- National level and State level Best coordinator awards for coordinating ICT Academy Learnathon 2021
- National level and State level Best coordinator awards for coordinating ICT Academy Skill Edge 2020
- National level and State level Best coordinator awards for coordinating ICT Academy Learnathon 2020
- Certificate of Appreciation for coordinating ICT Academy powered by SalesForce TrailHead "New India Student Championship 2018", the largest learnathon of India, February 2018.
- NPTEL Topper Award in Online Course Certification exam Oct 2018
- NPTEL Top Performing Mentor in Online Course Certification exam Oct 2018
- Mentor certificate for QEEE online certification course, IIT, 2018
- Certificate of Appreciation as Mentor for the NPTEL online certification course, 2017
- Mentor certificate for QEEE online certification course, IIT, 2016
- Best paper award in national conference in 2013
- Best paper award in international conference 2011

### **Project Interaction:**

• Industry interaction for B.E. project "Identification of Tooth Decay in Panoramic X-ray Using Image processing" with Tata Consultancy Services in 2013-14

Number of Workshop/Seminar/FDP/STTP attended: 56

Program Organized : 35