

**Dr. A. Umamageswari, M.E., Ph.D.,**  
**Deputy HOD-BDA,**  
**Associate Professor,**  
**Department of CSE, CET, SRMIST,**  
**Ramapuram Campus, Chennai.**  
**Mail id: umamagea@srmist.edu.in**



Dr. A.Umamageswari is a Associate Professor and Deputy Head of the Department for Big data Analytics at SRM Institute of Science and Technology, Ramapuram Campus, she is having more than 20 years of academic experience. She has completed, Ph.D in Computer Science and Engineering with Medical Image Processing and M.Tech in Sathyabama University, Chennai, B.E-CSE in Sri Venkateswara College of Engineering, Sriperumbudur, University of Madras. She is a Research Supervisor the SRM Institute of Science and Technology. She published more than 40 research papers published in SCI, Scopus and UGC Care Journals. She has already published 2 books in the Computer Science domain. She has organised and participated as a core member in numerous international and national Guest Lectue, FDP's and National and International Conferences. She has two patents. She has been a member of numerous Board of Studeis and professional organizations. He has received numerous awards, including the "Tamilnadu Chief Minister Medal". She is the active member for IEEE, ACM, ISTE, CSTA and IAENG Association. Under her leadership, the Institute has faced the 1st NBA –National Board of Accreditation cycle in the year 2018 and achieved Accreditation Status for 6 years.

**Area of Research:**

Computer Vision, Security in Medical Image Informatics, Machine Learning

**Selected Publications:**

1. A.Umamageswari, N.Bharathiraja, Shiny Irene (2023), “Novel fuzzy c-means based chameleon swarm algorithm for segmentation and progressive neural architecture search for plant disease classification”, ICT Express – Elsevier, September 2023, Vol:9, Issue:2, pp. 160-167, (SCI/SCOPUS/WoS Indexed) - **Article**
2. A.Umamageswari, J.Shiny Duela, K.Raja and S.Suresh(2023), “ Efficacy of V-Lab for Engineering Students during COVID-19”, Rededining virtual teaching pedagogy, pp-75-96 (**SCOPUS Indexed book Chapter**)
3. Vijayapriya, R., Umamageswari, A., Bhat, R., Dass, R., Manikandan, N.(2023), “Web-based data manipulation to improve the accessibility of factory data using big

data analytics: An industry 4.0 approach”, pp:19-34 (**SCOPUS Indexed book Chapter**).

4. Deepa S., Arasakumaran Umamageswari.(2023), “Analysis of Genetic Face Images with Respect to Reflexology for Prediction of Diseases”, *Traitement Du Signal*, Vol:40, Issue:1, PP.21-30. (SCI/SCOPUS/WoS Indexed) - **Article**
5. Umamageswari, A., Deepa, S., & Raja, K. (2022). “An enhanced approach for leaf disease identification and classification using deep learning techniques.” *Measurement: Sensors*, Vol. 24, 100568.(SCOPUS) - **Article**
6. Umamageswari, A., Saminathan, R., Stuthi, G., & Shankara Prasad, S. (2022). Diabetic retinopathy detection using deep learning based neural network along with machine learning algorithms.*International Journal of Health Sciences*,6(S2), 5845–5855 (**WoS – Article**)
7. A.Umamageswari, J.Shiny Duela, Diolin Sara, K.Raja (2022), “An Enhanced Identification and Classification Algorithm for Plant Leaf Diseases Based on Deep Learning”, *Traitement Du Signal*, Vol: 39, Issue : 3, pp:1013-1018, <https://doi.org/10.18280/ts.390328>, (SCIE / SCOPUS Indexed) - **Article**
8. Deepa, S., Umamageswari, A., Menaka, S. (2023). A Novel Hand Gesture Recognition for Aphonic People Using Convolutional Neural Network. In: Kannan, R.J., Thampi, S.M., Wang, SH. (eds) *Computer Vision and Machine Intelligence Paradigms for SDGs. Lecture Notes in Electrical Engineering*, vol 967. Springer, Singapore. [https://doi.org/10.1007/978-981-19-7169-3\\_22](https://doi.org/10.1007/978-981-19-7169-3_22) - **Conference Paper**
9. A.Umamageswari, S.Deepa, L.Sherin beevi (2022), “A Novel Approach for classification of diabetics from retinal image using deep learning technique”, *International Journal Health Sciences*, 6(S1), 2729-2736. <Http://doi.org/10.53730/ijhs.v6nS1.5196> (**WoS - Article**)
10. A.Umamageswari, M.A.Leo Vijilious, “Enhancing Security in Medical Image informatics with various Geometrical Attacks”, *Current Science*, August 2019, Vol, 2, No.3, pp.420-429. (SCI Indexed) - **Article**
11. A.Umamageswari, Nancy.A, Raghavi.R.L., Radha RamMohan.S, Prathyusha.G,”Modern Irrigation based on Web Weather Forecast”, *Taga International journal*, Vol.14, ISSN:1748- 0345(2018)(Annexure I) – **Article**
12. A. Umamageswari, C.S. Somu, I. Arokia Mary and R. Balaji, “Integrated Secure Medical Image Transfer Framework”, *International Journal of Printing, Packaging & Allied Sciences*, Vol. 5, No. 1, February 2017 (Annexure I) - **Article**
13. A.Umamageswari, M.A.Leo Vijilious,(2016), “A Novel Approach for classification of diabetes in Retinal Images using Blood Vessel and Optic Disc” *Asian Journal of Research in Social Sciences and Humanities*, Vol., No., pp 109-118. (Scopus Indexed) - **Article**
14. Saranya.M,G.L.Cyrl,A.Umamageswari,”Ear Feature based Human Identification System”, *Asian Journal of Research in Social Sciences and Humanities*, Vol6,issue 7,pp820-831,2016 (Annexure 1) – **Article**

15. A.Umameswari , G.R.Suresh, “Enhancing security in medical image communication using novel digital signature with various attacks” ARPN Journal of Engineering and Applied Sciences, Volume 10,Issue 12,July 2015 (Scopus Indexed) - **Article**
16. Umameswari A and Suresh G R(2014),”A New Cryptographic Digital Signature for Secure Medical Image Communication in Telemedicine”, International Journal of Computer Applications(ISSN 0975-8887),Vol.86, No.11,pp.4-9,(IF 0.821)
17. Umameswari A. and Suresh G.R. (2014), “Secure Medical Image Communication using ROI based Lossless Watermarking and Novel Digital Signature”, Journal of Engineering Research (Print ISSN 2307-1877, Online ISSN 2307-1885), Kuwait University, Vol.2 ,No.3 ,pp.87- 108,(Web of Science and SCIE Indexed Journal) - **Article**
18. Umameswari A. and Suresh G.R. (2014), “Novel Algorithm for Secure Medical Image Communication Using ROI Based Digital Lossless Watermarking and DS”, International Journal of Applied Engineering Research, Research India Publications (Print ISSN 0973- 4562, Online ISSN 1087-1090),Vol.9 ,No.22,pp.12163-1217 - **Article**
19. Umameswari A. and Suresh G.R. (2014), “A New Cryptographic Digital Signature for Secure Medical Image Communication in Telemedicine”, International Journal of Computer Applications (ISSN 0975-8887), Vol. 86, No. 11, pp.4-9, (IF 0.821).
20. Umameswari A., FerniUkrit M. and Suresh G.R. (2011), “A Survey on Security in Medical Image Communication”, International Journal of Computer Applications (ISSN 0975-8887), Vol.30, No.3, pp. 41-45, (IF 0.821).
21. Umameswari A. and Suresh G.R. (2013),“Performance Analysis of Secure Medical Image communication with Digital Signature and Reversible Watermarking”, ICTACT Journal on Image and Video Processing, Government of Tamilnadu, (ISSN: 0976-9099), Vol. 04, No. 01,pp.-647-651. (National journal)

**Patents: 3 patents published**

**Professional Bodies: IEEE, ACM, CSTA, ISTE, IAENG**

**Google Scholar: <https://scholar.google.com/citations?user=yEe2FzcAAAAJ&hl=en>**

**LinkedIn: r.umamesh ramesh**

**ORCID: <https://orcid.org/0000-0001-9750-2127>**

**SCOPUS: 55811289400**