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BIOSKETCH

Dr. C. Malarvizhi is a distinguished academician and researcher with a strong commitment to advancing knowledge in the field of image processing. She has consistently demonstrated excellence in her publications, teaching, and mentorship. Since September 2023, she has been working as an Assistant Professor in the Department of Computer Science Engineering at PSG Institute of Advanced Studies, Coimbatore. She also holds the position of Deputy Controller of Examinations at PSG IAS. Her primary research focus lies in the processing and analysis of cervical spine MRI images, an area in which she has published several impactful studies. She earned her postgraduate degree from Manonmaniam Sundaranar University, Tirunelveli, India, and completed her Doctor of Philosophy (Ph.D.) at Government Arts College, Coimbatore (affiliated with Bharathiar University).

Educational Profile

- **Doctor of Philosophy (Ph.D.) in Computer Science**
  Year of Passing: 2023
  Thesis title: Enhanced Herniated Cervical Spine Image Detection using Fusion Image Features
  Thesis Supervisor: Dr. Balamurugan P, Department of Computer Science and Research, Government Arts College, Coimbatore.

- **Master of Philosophy (M.Phil) in Computer Science**
  Manonmaniam Sundaranar University, Tirunelveli.

- **Master of Science (M.Sc) in Computer Science**
  Manonmaniam Sundaranar University, Tirunelveli.

- **Bachelor of Science (B.Sc) in Computer Science**
  Manonmaniam Sundaranar University, Tirunelveli.

Positions Held

Sep 2023 – Present	Assistant Professor Department of Computer Science Engineering PSG Institute of Advanced Studies Peelamedu, Coimbatore
Sep 2020 - May 2023	Assistant Professor

	Department of Computer Technology N.G.P Arts and Science College, Coimbatore
June 2017 – May 2018	Assistant Professor Department of Computer Science Arcot Sri Mahalakshmi Women's College, Arcot
Jan 2014 – Apr 2017	Lecturer in Jawahar Science College, Neyveli
Nov 2002 - Apr 2010	Lecturer in Dr. Mahalingam College of Engineering and Technology (MCET), Pollachi
May 2001 - Nov 2002	Lecturer in VLB Janakiammal College of Engineering and Technology, Kovaipudur, Coimbatore
Nov 1998 - Sep 2000	Lecturer in SCAD Gramodhaya Institutions, Cheranmahadevi.

Research Areas

- Medical Image Processing
- Machine Learning
- Deep Learning

Awards & Achievements

S.No	Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
1	NET	Computer Science and Applications	UGC	2018
2	SET	Computer Science and Applications	TNSET	2016
3	Awarded as a **Reviewer at the IEEE** Conference, ICCTAC - 2024.			

Journal Publications

1. *Muruganantham. A. Malarvizhi. C, Divya Vahini S, Saranya D and Uthiramoorthy, A,* ***A Music Recommender System to Identify the Emotional State of a Person Using Machine Learning Algorithms,*** *2025, IEEE - ICSADL, pp.1148-1152, doi: 10.1109/ ICSADL 65848. 2025. 10933118. (Indexed in SCOPUS).*
2. Malarvizhi. C, Muruganantham. A, **Cervical Disc Herniation Detection Using Morphological Image Processing and Neural Network Classification,** 2024 IEEE - ICCMSO, pp. 102 - 106, doi: 10.1109/ICCMSO61761.2024.00033. (Indexed in SCOPUS).
3. Malarvizhi. C, **Evaluation of morphological characteristics for detecting Cervical spine herniation: A comprehensive study,** 2024 International Journal of Research in Science and Technology, Vol 11, Issue 03.

4. Malarvizhi. C, Balamurugan. P, **Classification of various stages of Herniated Cervical Spine images using Edge Detection Operators**, 2022 IEEE - ICCMSO, pp. 177-181, doi: 10.1109/ICCMSO58359.2022.00045. (Indexed in SCOPUS)
5. Malarvizhi. C, Balamurugan. P, **Neural Network based Classification of Cervical Spine Images (MRI) using Texture Features,** International Journal of Advanced Science and Technology, Vol 29. No. 2. 2020, ISSN: 2207-6360. (Indexed in SCOPUS)
6. Malarvizhi. C, Balamurugan. P, **Qualitative Analysis of various Edge Detection Techniques Applied on Cervical Herniated Spine Images,** ICTACT Journal on Image and Video Processing, DOI:10.21917/ijivp.2019.0282. (ICTACT Journal)
7. Malarvizhi. C, Balamurugan. P, **Comparison of Normal Vs Herniated Cervical Images using Gray Level Texture Feature,** International Journal of Management Technology and Engineering, Vol.8, Issue XII, Dec 2018, ISSN: 2249 - 7455.(UGC)
8. Malarvizhi. C, Balamurugan. P, **Segmentation by Thresholding on Medical Images - A Survey.** International Journal for Research in Applied Science and Engineering Technology, Vol.5, Issue XI, Sep 2017, ISSN: 2321- 9653. (UGC)

Conferences/Proceedings:

1. **Significance of GLCM based Texture Features in Comparing Normal and Herniated Cervical Spine MRIs,** 2022 International Conference on Advanced Computing (ICAC), pp. 223 – 228.

National Conferences:

1. **Performance Analysis of IRIS used in Various Normalization Methods,** National Conference on Computer and Communication, Sri Vasavi College, Erode, 2009.
2. **Security Measures of Cyber Sentinel System used in Network Environment,** National Conference on Computer and Communication, Sri Vasavi College, Erode, 2008.
3. **Performance Analysis of Cyber Security Measures in Various Domains of Real Time Systems,** National Conference on Cyber Crime & Security Management (CCSM), Kongu Engineering College, Erode, Sponsored by Department of Information Technology (DIT), New Delhi, 2007.