Dr. N. VAIJAYANTHI

PROFESSOR

PROFILE

Skilled research professional with **22+ years of teaching experience** in engineering institutions and a strong research background with publications in reputed journals. In addition to institutional roles, I offer **freelance tutoring services** to engineering and technology students from global universities, providing **academic guidance in assignment writing, project development thesis writing, and research article writing services.**

SKILLS

- Proficient in MATLAB, Python and R programming
- Expertise in image processing, signal processing, data science machine learning, artificial intelligence, deep learning.

LANGUAGES KNOWN

English, Kannada and Tamil

CONTACT

PHONE: 9791756326

LinkedIn:
https://www.linkedin.com/in/dr-vaijayanthi-n-29377b6b/

EMAIL:
vaijuanand@hotmail.com,
ceo@e-spider.in

EDUCATION

- **Ph.D. (2019) : Anna University, Chennai**
  Faculty: *Information and Communication Engineering*
  Thesis Title: Computer Aided Detection and Classification of Masses in Mammograms based on Empirical Mode Decomposition

- **M.E. (2010) : Jayaram College of Engineering, Trichy**
  Specialization: *Communication Systems.* % Secured : 82.2

- **B.E. (1999) : PSNA College of Engineering, Dindigul**
  Branch: *Electronics & Communication Engg., : %* Secured: 76.6

WORK EXPERIENCE

Global Freelance Tutor and Research consultant
Freelancer
Ongoing
Offering tutoring services, specialized services in assignment writing, thesis writing, research article writing and academic project guidance to students from international universities in the field of engineering and technology

Indra Ganesan College of Engineering, Trichy
Dean (R & D) & Professor/ECE
Jan 2020–Present
Professor & Head / ECE (7 Years, 6 months)
June 2012 – Dec 2019

JJ College of Engineering & Technology, Trichy
Assitant Professor (S.G)
Jan 2002 – May 2012 (10 years, 4 months)

VLB Janakiammal Engg. College, Coimbatore
Lecturer
May 2001 – Oct 2001 (6 months)

SACS MAVMM College, Madurai
Lecturer
May 2000 – April 2001 (1 year)

PROFESSIONAL STRENGTHS

- 22+ Years of teaching experience & 8 Years as HOD/ ECE
- NAAC Coordinator during the Cycle 1 NAAC process.
- Completed multiple academic projects in the fields of image processing, signal processing, data science, and machine learning using MATLAB, Python and R programming..
- Organized two international conferences and one National Conference successfully.
- Publications in reputed international journals.
- Offering academic support to university students worldwide.

PUBLICATIONS

- **Vaijayanthi Nagarajan**, Elizabeth Caroline Britto, Senthilvel Murugan Veeraputhiran, Feature extraction based on empirical mode decomposition for automatic mass classification of mammogram images, *Elsevier: Medicine in Novel Technology and Devices,* Volume 1, 2019, 100004, ISSN 2590-0935

- **Vaijayanthi, N.**; Caroline, B. Elizabeth; Murugan, V. Senthilvel, Automatic Detection of Masses in Mammograms Using Bi-Dimensional Empirical Mode Decomposition, Journal of Medical Imaging and Health Informatics, Volume 8, Number 7, September 2018, *(SCIE Journal)* pp. 1326-1341(16)

- B. Elizabeth Caroline, **N. Vaijayanthi**, Feature Extraction of Digital Mammogram Based On Multidimensional Complete Ensemble Empirical Mode Decomposition With Adaptive Noise, International Journal of Advanced Engineering Technology E-ISSN 0976-3945, Vol. VII/Issue I/Jan.-March.,2016/404-409

- **N.Vaijayanthi**, B. Elizabeth Caroline and X. Susan Christina, Decomposition of Mammogram Images Based On Bi-Dimensional Complete Ensemble Empirical Mode Decomposition with Adaptive Noise, Australian Journal of Basic and Applied Sciences, 9(31) September 2015, Pages: 674-678, ISSN:1991-8178.

- **N. Vaijayanthi**, Face recognition using Laplacian Faces, IEEE International Conference on Engineering Technology (ICETECH) at Rathinam Technical Campus, Coimbatore, India, March, 2015

- **N. Vaijayanthi**, Maaleni R, Noise Reduction in ECG signal based on Ensemble Empirical Mode Decomposition (EEMD) and Discrete Wavelet Transform, IOSR Journal of Electronics and Communication Engineering, April 2014

- Mahalakshmi M, **Vaijayanthi N**, Hardware Implementation Of Ecg Qrs Complex Detection Using FPGA, IOSR Journal of Computer Engineering (IOSR-JCE)e-ISSN: 2278-0661, p-ISSN: 2278-8727 PP 20-28

- B. E. Caroline and **N. Vaijayanthi**, "Computer aided detection of masses in digital breast tomosynthesis: A review," 2012 International Conference on Emerging Trends in Science, Engineering and Technology (INCOSET), Tiruchirappalli, 2012, pp. 186-191, doi: 10.1109/INCOSET.2012.6513903.

- A. Padma, **N. Vaijayanthi**: "SEGMENTATION OF MASSES USING ADAPTIVE THRESHOLDING ON MAMMOGRAMS", Proceedings of a National Level Conference in "Signal Processing and Communication" held at JJ College of Engineering & Technology, Trichy on March 30, 2012.

- A. Padma, **N. Vaijayanthi** : "COMPUTER AIDED DETECTION OF SUSPICIOUS LEISONS USING ADAPTIVE THRESHOLDING BASED ON MULTI RESOLUTION ANALYSIS ON MAMMOGRAMS", Proceedings of a National Level Conference on "Recent Trends in Emerging Technologies" held at Kurinji College of Engineering, Manapparai on March 06, 2012.

- **N. Vaijayanthi**, M. Devipriya : "RECONSTRUCTION OF MAMMOGRAPHIC IMAGES USING COMPLEX WAVELETS", Proceeding of a National Level Conference in "Recent Trends & Research Issues in Antennas" held at Dr. Sivanthi Aditanar College of Engineering, Tiruchendur during February 09-10,2010.

ADMINISTRATIVE / OUTREACH ACTIVITIES AND ACHIEVEMENTS

1. **Dean – R&D** (Jan 2020 – Present): Leading research and development initiatives.
2. **NPTEL Local Chapter SPOC** (Feb 2020 – Apr 2021): Facilitated NPTEL courses and awareness programs.
3. **NAAC Coordinator** (2020–2021): Successfully coordinated and completed the SSR submission and NAAC visit.
4. **Head of Department/ECE** (Oct 2012 – Apr 2019): Managed department operations and academic activities.
5. **Pioneer of Team Admission Process** (2017): Achieved maximum admissions through collaborative efforts.
6. **POSH Cell Member** (Jun 2012 – Apr 2021): Contributed to preventing sexual harassment on campus.
7. **Resource Person and Invited Speaker:** Delivered talks on advanced topics in signal and image processing, NPTEL courses, and career guidance.
8. **Organized Conferences:** Successfully organized two international conferences and one national conference.
9. **Awards:** Recipient of the **"STAR" Award** (2015, 2016, 2017) and **Research Award** (2019) from Indra Ganesan Group of Institutions.