Department of Electronics and Communication Engineering

Personal Details	
Name:	Dr. G. Durgadevi
Designation:	Head of the Department
Educational Qualification:	M.E., Ph.D.
Experience:	17 years
Area of Specialization:	VLSI Design, Image Processing, Machine Learning Algorithms

Educational Details				
S. No.	Degree	Branch/Specialization	Institute/University	Year
1	B. E.	Electronics and Communication Engineering	AVC College of Engineering, Bharathidasan University, Trichy	2000
2	M. E.	VLSI Design	SMK Fomra Institute of Technology, Anna University, Chennai	2011
3	Ph. D.	Image Processing, Machine Learning Algorithms	Hindustan University, Chennai	2018

Publication Details

International Journals:

1. **Durgadevi, G., Sujatha, K., Thivya, K.S., Anand, M., Shobana, S.,** Enchodroma tumor detection from MRI images using SVM classifier, Research Anthology on Improving Medical Imaging Techniques for Analysis and Intervention*, 2022, pp. 1064–1070*

2. **K Sujatha, G Durgadevi, K Senthil Kumar, V Karthikeyan, RS Ponmagal, Rajeswari Hari, NPG Bhavani, V Srividhya, Su-Qun Cao,** Screening and early identification of microcalcifications in breast using texture-based ANFIS classification, *Wearable and Implantable Medical Devices.*

3. **V Srividhya, K Sujatha, RS Ponmagal, G Durgadevi, L Madheshwara,** Vision based detection and categorization of skin lesions using deep learning neural networks, *Procedia Computer Science, 2020, 171, pp. 1726–1735.*

4. **K Sujatha, KS Thivya, M Anand, N Jayachitra, G Durgadevi, NPG Bhavani, V Srividhya,** Vision machine learning for detection of ocular pathologies from iris images, *Journal of Discrete Mathematical Sciences and Cryptography*, *2020, 23(1), pp. 145–155.*

5. **Saravanan, T., Durga devi, G. "**Mechanical behavior of bricks from waste material*", Materials Today: Proceedings, 2023, https://doi.org/10.1016/j.matpr.2023.03.581*

6. **Durga Devi,G, Chidambaram, P.K. "**Evaluation of foam-based composite materials for automotive industry", Materials Today: Proceedings, 2023, https:// doi.org/ 10.1016/ j.matpr. 2023.04.019

7. **Padmavathy, R., Kalaiarasi, G., Durgadevi, G., Yogitha, R., Karpura Dheepan, G.M,** Study of Support Vector Machine for Classification of Brain Tumours, AIP Conference Proceedings*, 2024, 3022(1), 020008.*

8. **G.Durgadevi**, Menaka A, (2019). Investigation of Lung Cancer using GLCM with CT Scan Images, *Journal of Advanced Research in Dynamical and Control Systems,* 11(2), 619-625.

9. **G.Durgadevi**, Vijayakumari G, (2017). Soldier Monitoring and Location Tracking System using IoT, *International Journal of Innovative Research in Science, Engineering and Technology*, 6(10), 20977-20981.

10. **G.Durgadevi**, Hemamalini V, (2017). Secured Vehicular Systems Using Wireless Sensor Networks, *International Journal of Innovative Research in Science, Engineering and Technology*, 6(8), 17805-17809.

11. **G.Durgadevi**, (2019). Audio Guide for Patient Regarding Doctor Prescription, *The International journal of analytical and experimental modal analysis,* 11(9), 3342-3345.

12. **G.Durgadevi**, (2019). A Novel Intrusion Detection System Using Wireless Sensor Networks, *A Journal Of Composition Theory,* 12(12), 1384-1391.

13. **G.Durgadevi**, (2019). Enhancement and Estimation of Breast Cancer Images, Journal of Interdisciplinary Cycle Research, 11(12), 2066-2071

14. **G.Durgadevi**, S.Yuvashree, P.Rackslyn Jenefer Ketzie, P.R.Priyadharshini, (2017). Retinal Analysis for Early Diagnosis of Diabetic Retinopathy, *International Journal of Pharmacy & Technology*, 9(2), 30220-30225.

15. **G.Durgadevi**, G.Ramprabu, S.Shobana, (2017). Detection Of Enchodroma Tumor in MRI Images Using SVM Classifier, *International Journal of Pharmacy & Technology,* 9(2), 29861-29866.

16. G.Ramprabu, **G. Durgadevi**, R.Chitra, (2017). Analysis of Cluster Based Secure Optimum Routing Protocol for Security in Wireless Sensor Networks, *International Journal of Pharmacy & Technology,* 9(2), 29867-29871.

17. **Durgadevi G**, (2017). Virtual Guide for Assisting Blind People using Human Body Network, *Journal of Innovation in Science and Engineering Research*, 1(1), 1-5.

18. **Durgadevi G**, Sornalatha R, (2017). An Automatic Pressure Supervision and Mitigation System for Mobility Impaired Patients, *Journal of Innovation in Science and Engineering Research*, 1(1), 7-9.

19. Hemamalini V, **Durgadevi G** (2017). Secured Vehicular Systems Using Wireless Sensor Networks, *Journal of Innovation in Science and Engineering Research*, 1(1), 66-69.

20. **Durgadevi G**, Himanshu Shekhar, (2016). An Intelligent Classification of Breast Cancer Images, *Indian Journal of Science and Technology*, 9(28).

21. **Durgadevi G**, Himanshu Shekhar, (2015). Identification of Tumour using K-Means Algorithm, *International Journal of Advance Research and Innovative Ideas in Education*, 1(5), 227-231

22. **Durgadevi G**, Himanshu Shekhar, (2015). An Effective Two Way Classification of Breast Cancer Images, *International Journal of Applied Engineering Research,* 10(21), 42231-42238.

23. **Durgadevi G**, Jamuna P, Janet Priskilla J, Princy M, (2015). A study on pressure monitoring and relieving systems, *International Journal of Innovative Research in Science, Engineering and Technology,* 4(3), 1408-1412.

International Conference:

1. **Akila, T., Vasanth, P., Kumar, G.S., Durgadevi, G. "**Dingo Algorithm-Based Efficient Group Leader Selection in Wireless Network**"**, *Proceedings of the 2nd International Conference on Edge Computing and Applications, ICECAA 2023, 2023, pp. 122–126, https://doi.org/10.1051/e3sconf/202338702005*

2. **Durgadevi G**, (2018). A Novel Intrusion Detection System to Improve the Security Using Wireless Sensor Networks, *International Conference on Innovation in Science and Engineering Research (ICISER'18).*

3. **Durgadevi G**, Himanshu Shekhar, (2016). Image Denoising With Hard and Soft Threshold Using Wavelet Transform In Breast Cancer Images, *2nd International Conference on Researches in Science, Management and Engineering, ICRSME 2016,* 10(92), 307-312.

4. **Durgadevi G**, Vanaja Shivakumar, (2015). A Survey of Effect of Pressure Ulcer and State of the Art Pressure Monitoring and Relieving Systems, *2nd International Conference on Computing Communication and Advanced Networking 2015 (ICCCAN – 2015).*

National Conference:

1. **Durgadevi G**, Menaka A, (2019). Investigation of Lung Cancer using GLCM with CT Scan Images, *Two day National Conference on Smart Information Light fidelity (Li-fi) Internet of things Conference (SILICON -19)* held on 07 and 08 March, 2019/

2. **Durgadevi G**, Himanshu Shekhar, (2016). Soft Thresholding for Noise Elimination in Cancer Images, *Two day National Conference on Smart Information Light fidelity (Li-fi) Internet of things Conference (SILICON -16).*

3. K.S.Nandhini Devi, **G.Durgadevi**, (2016). Enhancement and Estimation of Breast Cancer Image, *National Conference on Recent Trends in Electronics and Communications (NCRTECE-16).*

Professional Society Membership
1. IEEE (Institute of Electrical and Electronics Engineers) Professional Member: 99117463 2. ISTE (The Indian Society for Technical Education) Life Member: 115573 3. ISRD (International Society for Research and Development) Student Member: SM3140902397 4. IAENG (International Association of Engineers) Life Member: 186624

Program Organised
1. Three Day Workshop on "Economic Empowerment through Computer Aided Training for Women in Self Help Group (SHG) of Vengaivasal Village", financially supported by Tamil

Nadu State Council for Science and Technology (TNSCST) (Autonomous body of Govt. of Tamil Nadu) from 03-08-2023 to 05-08-2023.

2. One-day Online Seminar on "NAAC Revised Assessment and Accreditation Framework – An Approach", National Assessment and Accreditation Council (NAAC)

3. One day webinar "Strategic Quality as a Competitive Lever for Organizations" on 20th June, 2020.

4. New Prince Internal Hackathon 2020, a preliminary event for Smart India Hackathon – SIH 2020 from 9th January to 25th January, 2020.

5. Kickstarter 2020 for Young Entrepreneurs on 22nd February, 2020.

6. One day seminar on "Highly Effective Teaching & Learning", Catalyzed and Supported by Tamilnadu State Council for Science and Technology (TNSCST) (Autonomous body of Govt. of Tamilnadu) on 3rd November, 2018.

7. National level Technical Symposium "TECHPLEX '19" on 05th October, 2019

8. National level Technical Symposium "TECHPLEX '18" on 08th September, 2018

9. Inter College Students Exhibition "EXSTO – 16" on 1st August, 2016

10. National level Technical Symposium "TECHPLEX '16" from 26th August to 27th August, 2016

11. Third National Conference on Emerging Trends in Electronics and Communication Engineering – NCETECET`- 16 on 5th April, 2016.

12. National level Technical Symposium "CRISPO – 15" on 4th September, 2015.

13. Inter College Students Exhibition "EXSTO – 15" on 1st August, 2015

14. Second National Conference on Emerging Trends in Electronics and Communication Engineering – NCETECE - 15" from 6th April to 7th April, 2015.

15. National level Technical Symposium "CRISPO – 14" on 23rd August, 2014

16. First "National Conference on Emerging Trends in Electronics and Communication Engineering – NCETECE -14" on 16th April, 2014.

17. National level Technical Symposium "TECHPLEX '13" on 22nd February, 2013.

18. Inter College Students Exhibition "EXSTO – 13" on 31st July, 2013

19. Inter College Students Exhibition "EXSTO – 12" on 20th July, 2012

Program Attended

1. Six days Anna University FDP training programme on "4G/5G Communication Networks" conducted at Loyola ICAM Engineering and Technology, Chennai from 29-01-2024 to 03-02-2024.

2. AICTE sponsored FDP on "Responsibility of Higher Education Institutions under AICTE in Implementing Sustainable Development Goals" organized by Sri Sairam Institute of Technology, Chennai from 11-02-2021 to 24-02-2021.

3.DST sponsored 14 day online FDP on "Entrepreneurship" organized by MIET, Kanniyakumari from 20-01-2021 to 04-02-2021.

4. AICTE sponsored online STTP on "Applied Soft Computing and Vision Machine Techniques" organized by Dr.MGR Educational and Research Institute from 22-03-2021 to 27-03-2021.

5. Conference on "Adopting ICT Solutions for Digital Growth & Transformation", organized by ICT Academy, Chennai, 2017.

6.National Summit on "Advancement and Automation of Accreditation for Higher Education in India", organized by IIR, Chennai, 2016.

7. One Day Workshop on "R & D Project Proposals – Awareness, needs and benefits", organized by Centre for Technology Development and Transfer (CTDT), Anna University, Chennai, 2013.

8. One Day Workshop on "CADENCE Software for VLSI", organized by CADENCE Software, India, 2012.

9. Two days workshop on "VLSI Design", organized by Sri Sairam Engineering College, Chennai, 2011.

Other Details

Patents:

Patent Name: Estimation of Biomarkers for Adaptive Immunity in Infectious Diseases Using Smart IoT Sensors and Deep Learning
Patent Number: 2021102089

Books and Chapters Published:

1. A Chapter titled as Enchodroma Tumor Detection From MRI Images Using SVM Classifier" in book titled as "AI Innovation in Medical Imaging Diagnostics".
   Publisher: IGI Global Publishers
   E-Book ISBN: 978-1-79-983-093-1
   Date of Book Posted: January, 2021

2. A Chapter titled as "Screening and early identification of micro calcifications in breast using texture-based ANFIS classification" in book titled as "Wearable and Implantable Medical Devices".
   Publisher: Academic Press (Elsevier)
   E-Book ISBN: 978-0-12-815369-7
   Date of Book Posted: 10, September, 2019

3. Chief Editor of "Advances in Electrical Engineering", Volume – 1,
   Paper back ISBN: 987-93-5335-251-6
   E-Book ISBN: 987-93-5335-252-3
   Publisher: AkiNik Publications

Year of Publication: 2019
4. A Chapter titled as "Real Time Applications of ANN and Fuzzy Logic/Industrial Engineering and Management".
ISBN: 987-93-84443-52-8
Publisher: International Research Publication House
Year of Publication: 2017

Projects Fund Received:

Sl. No.	Name of the Project	Name of the Funding Agency	Amount Received in Rupees
1	NPTEL Text Translation	AICTE, Government of India	57,750
2	AICTE-Student Learning Assessment Project	AICTE, Government of India	11,800
3	One day seminar on "Highly Effective Teaching & Learning"	Tamilnadu State Council for Science and Technology (TNSCST) (Autonomous body of Govt. of Tamilnadu)	15,000

Resource Person:
1. Chaired a Session Chair for "2022 International Conference on Communication, Computing & Internet of Things - IC3IoT-22" on March 10th & 11th, 2022 organized by Department of Electronics and Communication Engineering, Sri Sairam Engineering College, Chennai
2. Chaired a Session Chair for Paper presentation at Student's Symposium, NEXUS-2022 on "Frontiers in Greener World" on on March 17th, 2022 organized by Department of Electrical and Electronics Engineering, Dr.MGR Educational and Research Institute, Chennai.
3. Chaired a Session Chair for Paper presentation at Student's Symposium, NEXUS 2K24 – Two Days National Level Technical Symposium conducted on February 15th and 16th 2024 by the Department of EEE & BME at Dr. M. G. R. Educational and Research Institute, Chennai.
4. Presented a webinar on "Role of AI & ML in Space Technology" on 02-03-2024 at Saveetha Engineering College, Chennai.
5. Presented a webinar on the title "Holistic Approach of Business Plan Development for Entrepreneurs" for Entrepreneurial Orientation Programme on 5th December, 2020.