Profile

Name of the Faculty	**Dr. T. Mahalakshmi**	
Designation	Assistant Professor	
Department	Electronics and Communication Engineering	
Date of Birth	02-05-1979	
DOJ the Institution	28-11-2011	
Employee ID	ECE060516	
Address for communication	Flat no: 502, Meera krishna Residency, Mahadevapuram colony, kanuru, vijayawada-7	**Permanent Address** Flat no: 502, Meera krishna Residency, Mahadevapuram colony, kanuru, vijayawada-7
Mobile No	9441266701	**Email-ID** dasari.maha@pvpsiddhartha.ac.in
AICTE Unique ID	1-1476397374	

Education Qualifications	UG	PG	Ph. D	Others
	B.Tech,ECE (First class)	M.Tech (System and Signal Processing) First Class with Distinction	Digital Image processing	-----

Work experience	Teaching	Research		Industry	Others
	14 years	---		----	---

Area of Specialization	Digital Image Processing , ECE

Courses taught at Under Graduate/ Post Graduate Level: (full course title only)

- Electronic Devices and Circuits, Microprocessors and Microcontrollers, Linear Integrated Circuits Applications, Integrated Circuits and Its Applications, Control Systems, Principles of Communication, Digital image Processing, Digital IC Applications, Analog Electronic Circuits, Network Analysis and Synthesis, VLSI Design, Computer Networks, Switching Theory and Logic Design, Pulse and Digital Circuits, Basic Electronics Engineering, Analog Circuits, Electronic Devices and Amplifier Circuits, Electronic Circuit Analysis, Wireless communications and Networking, Renewable energy resources.

Professional Memberships & ID's: ISTE-LM100926

Research Publications & Guidance	National Journals	International Journals	National Conferences	International Conferences	Patents	Books / Book chapters
	2	16	-	9	1	--
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| Details of Paper Publications (In IEEE Format only Descending order) | **Journals:**

1. **Optimized Attention – Driven Bidirectional Convolutional Neural Network : Recurrent Neural Network for face book Sentiment Classification** published in International Journal of Business data communications and networking (ISSN:1548-0631),Vol. 19, No.1, **July,2024**, pp.:1-20.

2. **Systematic survey on chronic disease prediction using different machine learning Techniques published** in Revue d' intelligence Artificielle, ISSN: 1958-5748, page no: 1645-1646, December 2023.

3. **Pragmatic investigations to smart dusts location appraisal precisely using machine learning**, published in journal of theoretical and applied Information technology, Vol .101, No.16, ISSN 1992-8645, 31st Aug 2023

4. **Evaluation Of Brain Tumor Classification Techniques on Identification of Eeg in Medical Images** published in ARPN Journal of Engineering and Applied Sciences, ISSN: 1819-6608, pp. 345-351, feb 2023.

5. **A new algorithm for detection of nodes failures and enhancement of network coverage and energy usage in wireless sensor networks** published in *Materials today proceedings.,*(VIEW PAPER)*, on 5 june 2022*

6. **Fibonacci Multichaos Algorithm for Medical Image Encryption for Transmission Through wavelet Transform Based OFDM System and Its VLSI Realization** published in *MAY 2022in International journal and bio medical engineering,ISSN:2626-8493, DOI:10.3991/ijoe.v18i06.30281,Pg.No:133-139.*(VIEW PAPER)

7. **Visible-light wireless communication system performance signature improvement for high bit rate transmission system** published in *Journal of Optical Communications, ISSN: 2191-6322 December 2022*, https://doi.org/10.1515/joc-2022-0250 (VIEW |

PAPER)

8. **Enhancement of Energy Efficiency and Network Lifetime Using Modified MPCT Algorithm in Wireless Sensor Networks** published in *Journal of Interconnection Networks, Volume:22, Issue:3, Published: March 2022,* **(VIEW PAPER)**

9. **Adaptive Filter with Type-2 Fuzzy System and Optimization-Based Kernel Interpolation for Satellite Image Denoising** published in *COMPUTER JOURNAL Volume: 63 Issue: 6, Pages: 913-926 ,DOI: 10.1093/comjnl/bxz168 Published: JUN 2020.* (VIEW PAPER)

10. **Avoidance Of Collision Using Copycat Technology** in *IJEAT, volume no:9,issue:4, published in march 2020,1460-1462 (printed version) ISSN no: 2249-8958* (VIEW PAPER)

11. *A Survey On Hybrid Filters For Enhancing Intensity Of Satellite Image By Using Denoising Algorithms* in *JASC: Journal of Applied Science and Computations ISSN NO: 1076-5131*

12. **A Review of Satellite Images based on Hybrid Invariant Local Features** in *International Journal of Pure and Applied Mathematics Volume 114 No. 7 2017, 197-206 ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version)* (VIEW PAPER)

13. **An efficient image noise estimation technique using type-2 fuzzy set and genetic algorithm** in *Journal of Theoretical and Applied Information Technology 15th August 2017. Vol.95. No.15, pages:3413-3421, ISSN: 1992-8645 E-ISSN: 1817-3195* (VIEW PAPER)

14. **A Review of Image Noise Estimation Technique Using Type-2 Fuzzy Set and Genetic Algorithm** in *International Journal of Pure and Applied Mathematics Volume 114 No. 7 2017, 207-215 ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version)* (VIEW PAPER)

15. **MATLAB Implementation of an Efficient Technique for Detection of Brain Tumor by using Watershed Segmentation and Morphological Operation** in *GRD Journals Global Research and Development Journal for Engineering | Volume 1 | Issue 4 | March 2016, ISSN: 2455-5703, PP :80-87* **(**VIEW PAPER**)**

16. **Vision Based Plant Leaf Disease Detection on The Color**

Segmentation through Fire Bird V Robot in *GRD Journals-Global Research and Development Journal for Engineering | Volume 1 | Issue 4 | March 2016 ISSN: 2455-5703, PP: 75-79.* (VIEW PAPER)

17. *E, H and J field Variation in H-Plane Horn Antenna when EBG unit Cell is placed inside the Wave Guide* published in *International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 2, Issue 12, December 2013 ISSN: 2278 – 1323*

18. **Radiation Beam Configuring By EBGS As Reflecting Planes** *in IJIRCCE ,ISSN Number :2320-9801,Vol-1,Issue-9,Page numbers:2163-2167,November-2013* (VIEW PAPER)

Conferences:

1. **Enhancement of Network Security in MANET using Adaptive Coronavirus Herd Immunity Optimizer (ACHIO) Algorithm for IoT Applications** published in Proceedings of the 3rd International Conference on Applied Artificial Intelligence and Computing (ICAAIC-2024) IEEE Xplore Part Number: CFP24BC3-ART; ISBN: 979-8-3503-7519-0

2. **Virtualization Framework for securing cloud to 5G Networks using Ant Lion Optimization Constructed KGMO for Mobility Supervision** published in Proceedings of the International Conference on Sustainable Emerging Innovations in Engineering and Technology,IEEE,Sep 2023

3. **A new algorithm for detection of nodes failures and enhancement of network coverage and energy usage in wireless sensor networks** published in Proceedings of the Materials Today: Proceedings, 27 April 2023.

4. **Statistical Analysis of Big Data Models in Android Malware Detection Statistical Analysis of Big Data Models in Android Malware Detection** - published in International conference on Edge computing and Applications, ICEAA-2022, PP, 185-189

5. **Performance Analysis of DSR and Cache Customized DSR Steering Protocols in Wireless Mobile ADHOC Networks** - Proceedings of the 5th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), I-SMAC 2021, 2021,pp. 1348–1356.

6. **An Efficient Image Noise Estimation Technique using Type-2 Fuzzy set and Genetic Algorithm** in National Conference on Recent Trends in Electrical and Electronics Engineering (RTEEE – 2K17) held on 14th – 15th April 2017

	7. **Satellite Image Coregistration Based on Hybrid Invariant Local Features** in National Conference on Recent Trends In Electrical And Electronics Engineering (RTEEE – 2K17) held on 14th – 15th April 2017.
	8. **GPRS Based Vehicle Navigation System by Using ARM Processor** - International Conference Information &Engineering Science-2013 held on 21st and 22nd Feb 2013.
	9. **Implementation of Affine Combination of Adaptive filter Algorithm For Noise Cancellation** - International Conference on Electrical, Electronics And Computer Science-2012 held at Vizag on 25thNovember 2012.
Details of Patents Published / Granted	**AA-Predictive: AIRCRAFT ACCIDENTS PREDICTIVE USING MACHINE LEARNING** • **no: 202011054181, published on 01-01-2021** Developed a machine learning-based predictive system for analyzing aviation data to identify potential causes of aircraft accidents. The model leverages historical flight data, weather conditions, and operational parameters to assess risk factors and improve aviation safety.
• Details of Certification Courses / Workshops / STTP's / FDP • (participated / organized)	**Faculty Development Programs (FDPs):** • SOC design for 5G beyond wireless communications and signal processing applications, Sponsored by E & ICT, NIT Warangal (5-2-2025 to 15-2-2025) • A five-day women's special "Happiness program held at P.V.P.S.I. T (09-03-2025 to 13-3-2025) • Internet of things and prediction control, NITW (Feb 03-05,2025) • Next-Generation Wireless Communication Systems: Trends, Technologies and Future Directions, LBRCE (10-02-2025 to 14-02-2025) • The Next Generation VLSI & Mems Devices in Medicine SERB, VRSEC (Dec 20-22,2024) • IoT and Embedded Systems, NITTTR (23/09/2024 to 27/09/2024)

	- Microstrip Patch Antenna Design Techniques and Tools, NITTTR, PVPSIT (16/09/2024 to 20/09/2024) - Online NEP 2020 Orientation & Sensitization Programme, MMTTC, Osmania University, Hyderabad, Telangana (19.07.2024 to 27.07.2024) - Artificial Intelligence and IoT, PVPSIT (25-01-2024) - 5G and Beyond, NITTTR, PVPSIT (05-02-2024 to 09-02-2024) - The Digital Leap in Learning: GENAI Tools for Academic Empowerment, PVPSIT (02-03-2024) - Industry 4.0/5.0, PVPSIT (15-04-2024 to 27-04- 2024) - Antennas Design for Modern wireless applications, PVPSIT, ENTUPLE (21-05-2024 to 22-05-2024) - Quality research paper and Funding project proposal writing, PVPSIT, EEE (11- 03-2024 to 15-03-2024) - Development of IoT System for Targeted Applications using ARM, PVPSIT, PHYSITECH (21-06-2023 to 22-06-2023) - Accreditation and outcome-based learning, NPTEL (28-8-2023 to 29-10-2023) - The Next Generation VLSI & Mems Devices In Medicine, SERB, VRSEC (20-12-2023 to 22-12-2023) - Novel materials, Devices and application, VRSEC, ATAL (11-12-2023 to 16-12-2023) - VLSI Mentor Graphics Tools, PVPSIT (15-05-2023 to 18-05-2023) - Recent trends in Wireless communication, PVPSIT (24-04-2023 to 28-04 -2023) - Antennas and wireless technologies, PVPSIT (20-02-2023 to 24-02-2023) - All India seminar on 5G – The new radio, PVPSIT (14-10-2022 to 15-10-2022) - VLSI design & Nano electronics, PVPSIT (01-09-2022 to 08-09-2022)

	- Enhancing research capabilities for academic career progression (05-09-2022 to 09-09-2022) - Application Specific Integrated Circuit Design (ASIC) Using Mentor Graphics Tools (14-12-2021 to 15-12- 2021) - Wearable Robotics: design, sensing and support. ATAL (24-12-2024 to 28-12-2021) - AWS and Machine learning (E & ICT academy, NIT Warangal and Andhra Loyola Institute of Engineering) (04-10-21 to 13-10-2021) - Essentials of 5G Communications, PVPSIT (26-08-2021 to 28-08 -2021) - Framework for Online Assessment Days, ATAL (16-08-2021 to 20-08-2021) - ICT Mode on Outcome Based Curriculum-Design and Implementation (02-08-2021 to 13-08-2021) - "VLSI Design, Verification and Testing" – AICTE Training and Learning (ATAL) Academy, Government Engineering College, Rajkot (June 7–11, 2021). - "Cyber Physical Systems" – Organized by VRSEC (May 17–21, 2021). - "Robotics" – AICTE Training and Learning (ATAL) Academy, Shri Vishnu Engineering College for Women (Feb 23–27, 2021). - "Lab On CHIP" – AICTE Training and Learning (ATAL) Academy, S.R.M Institute of Science and Technology (Jan 18–22, 2021). - "IoT Application Development Using Python Phase-IV (Industrial IoT)" – Narasaraopet Engineering College (Dec 7–12, 2021). - "Advanced Optical Access Networks and its Role in Smart Cities" – AICTE Training and Learning (ATAL) Academy, IIIT Kota, MNIT Campus Jaipur (Nov 23–27, 2021). - "IPR & Innovation Management in Engineering Science" – Internal Quality Assurance Cell, PVPSIT (Oct 8, 2021). - "ICT Tools for Teaching, Learning Process and Institute"

– Electronics & ICT Academies (NIT Patna, MNIT Jaipur, PDPM IIITDM Jabalpur, IIT Guwahati, IIT Roorkee) (Aug 10–21, 2021).

- "VLSI & FPGA Signal Processing" – MHRD, Govt. of India, E & ICT Academy, NIT Warangal at GITAM Institute of Technology, Visakhapatnam (May 2–7, 2018).

Workshops:

- "Cryptography and Coding Theory" – MHRD, Govt. of India, E & ICT Academy, NIT Warangal (Jan 28 – Feb 1, 2019).

- "Bhuvan Overview Training" – NRSC (National Remote Sensing), Hyderabad (June 13–14, 2018).

- "Feature Extraction & Classification Techniques for Pattern Recognition & Machine Learning using MATLAB" – Scientific Computing Solutions & IT Dept., PVPSIT (June 27–28, 2015).

- "Advanced Image Processing Techniques" – GEC (Sept 23, 2017).

- "Overview on Latest Telecom Technologies" – Conducted by BSNL (Feb 21–23, 2017).

- "e-Yantra Lab Setup Initiatives" – Vishwakarma Institute of Technology, Pune (Jan 18–19, 2016).

- "Advances in Mathematical Models for Image Processing" – PVPSIT, ECE Dept. (March 4–5, 2016).

- "Advanced Trends in Embedded Systems (ATES-2014)" – PVPSIT, EEE Dept. (Feb 28 – Mar 1, 2014).

- "Signals and Systems" – Organized by ECE Dept., PVPSIT (Jan 2–12, 2014).

Seminars & Training Programs:

- National Intellectual Property Awareness Training Program, SAGTE, Vijayawada(18-04-2024)

- Science in engineering Materials Perspective(24-02-2024)

	- A seminar on IPR and Design filing at PVPSIT, organized by P.V.P.S.I.T (12-10-2022)
	- A guest lecture on The changing face of broad casting, P.V.P.S.I.T (22-09-2022)
	- A guest lecture on The changing face of broad casting, P.V.P.S.I.T (14-09-2022)
	- Design and Implementation ofOutcome Based Curriculum, P.V.P.S.I.T , 19th March, 2022
	- "IPR and Patents" – By Mr. K. Ravindranath, Scitech Patent Art Services Pvt Ltd, Hyderabad, PVPSIT ISTE faculty chapter & IQAC (Sept 29, 2018).
	- "Intellectual Rights by Patents" – Allinnov Research and Development Pvt. Ltd., PVPSIT (July 13, 2018).
	- "Art of Living – Orientation Program" – PVPSIT, Speaker: Mr. S. Mahesh, Art of Living Trainer (Aug 7, 2018).
	- "Internal Quality Assurance – Faculty Orientation" – PVPSIT (Feb 6, 2016).
	- "Time Management" – By Mr. Dwaraka Ramana (First America Organization, Hyderabad) & Mrs. Sailaja Manikonda (ISTE Chapter, PVPSIT) (Jan 23, 2016).
	- "Patents-Inventions Based Research in Institutions & Inventions and its Protection" – Organized by IQAC, PVPSIT (Dec 5, 2015).
	ISTE & IIT Workshops: - ISTE STTP on "CMOS, Mixed Signal and RF VLSI Design" – IIT Kharagpur (Jan 30 – Feb 4, 2017).

	• ISTE Workshop on "Cyber Security" – IIT Bombay, National Mission on Education through ICT, MHRD, Govt. of India (July 10–20, 2014). • ISTE Workshop on "Analog Electronics" – IIT Kharagpur in association with PVPSIT, Kanuru (June 4–14, 2013). **CERTIFICATION COURSES** **NPTEL** • Accreditation and outcome-based learning (12 WEEK COURSE) 28-8-2023 to 29-10-2023 • OP-AMP BASED (12 WEEK COURSE) 18/07/2018 **COURSERA** • Computer Vision - Object Tracking with OpenCV and Python 10-08-2020 to 21-08-2020 • AI for Everyone 21-04-2020 to 12-06-2020 • Technical Support Fundamentals 01-05-2020 to 25-05-2020 • Introduction to MAT LAB • Computer Vision – Object Detection with OpenCV and Python 10-08-2020 to 21-08-2020
Details of Projects Applied	Title: A Computer Aided Assessment tool for Mammogram Analysis (SERB)
Any Other information	----

(Dr.T. Mahalakshmi)