



**Name** Dr. V. Gowthami  
**Designation** Assistant Professor  
**Department** Electronics and Communication Engineering  
Embedded Systems and Image Processing  
**Specialization**  
**Experience** 8 years 6 months  
**E-mail ID** gowthamiece@mvit.edu.in  
**Research IDs** Scopus author ID - 57222613845

### Academic Qualifications:

Examination	Institute / University	Year	Subjects
Ph.D.	Madras Institute of Technology, Chennai	2023	-
PG (M.E/ M.Tech/ M.Phil)	Velammal Engineering College, Chennai	2014	Embedded System Technologies
UG(B.E/ B.Tech/ BSC)	PTR College of Engineering and Technology, Madurai	2012	ECE

### Details of Employment Experience: (Starting with the most recent)

Job Title	Employer	From	To
Assistant Professor	Manakula Vinayagar Institute of Technology, Puducherry	Sep 2023	Till Date
Teaching Fellow	Madras Institute of Technology, Chennai	Aug 2015	Aug 2023

### Academic/Administrative Responsibilities:

Position	Department/Cell/Institution	From	To
Class Advisor	ECE /MIT	Jan 2024	Till date
Project Coordinator	ECE /MIT	Nov 2023	Till date
Bus Incharge	-	Nov 2023	Till date

### Research Contributions:

No.of Publications				No.of Patents			No. of Funds Sanctioned	
Internati onal Journal	National Journal	Internatio nal Conferenc e	National Conferen ce	File d	Publish ed	Grante d	FDP/Work shop/Semin ar	Funded Project s
2	0	11	-	-	-	-	-	-

## **Details of Academic Achievements, Awards and Recognitions:**

1. **Best Paper Award**- “Raw Bayer pattern image synthesis on Histogram of gradients for pedestrian detection”, Presented on ICSCAN’23 sponsored by IEEE held on Manakula Vinayagar Institute of technology, 17<sup>th</sup> & 18<sup>th</sup> November 2023.
2. **Nptel Certified** with Elite on subject “Digital Electronics”
3. **Anna university Rank holder** in ME, Anna University, Chennai.
4. **Awarded as a Best student hard worker** in BE.
5. Certified to be the best in Cultural and Elocution competitions
6. Served as a session chair in various cultural activities conducted in inter and intra college events.
7. Served as a session chair in International Conference on Artificial Intelligence for Internet of Things AIIoT 2024 , VIT, Vellore.

## **Journal – Scopus Indexed**

- **Gowthami V, Bhoopathy Bagan K & Ewins Pon Pushpa S, ‘A novel approach towards high-performance image compression using multilevel wavelet transformation for heterogeneous datasets’, The Journal of Supercomputing, Springer ,ISSN 0920-8542,2022. Impact Factor : 3.3, March 2023.**

## **Book Chapter – Scopus Indexed**

- Mrs. V.Gowthami , Sneha G “**Melanoma Detection Using Recurrent Neural Networks**” published in book **Lecture notes in Electrical Engineering - “Advances in Automation, Signal Processing, Instrumentation, and Control** “ by Springer , April 2021

## **International Conference Presentations**

1. Gowthami V, Sneha G “**Raw Bayer Pattern image synthesis on HOG for pedestrian detection**” Presented on 5<sup>th</sup> IEEE International Conference on Systems, Computation, Automation and Networking (ICSCAN 2023) ON 17<sup>th</sup> & 18<sup>th</sup> Nov 2023.
2. Gowthami V , Mejalín Arno B, Vinothagan J, Arun Kumar R, ‘**Smart Assistive System for the Visually Impaired**’ Presented on Second International Conference on Advancements in Science, Management & Engineering (ICSME) 2023” on 24<sup>th</sup> & 25<sup>th</sup> June 2023.
3. Gowthami.V, Sneha G “**Melanoma Detection Using Recurrent Neural Networks**” presented on International conference on Automation, signal processing, instrumentation and control ICASIC-year 2020.
4. Gowthami.V , Sujeetha Y “**Region Based Medical Image Compression for Telemedicine Application**” presented on International conference on contemporary engineering and technology –year 2020.
5. Gowthami.V, Dr.K.Bhoopathy Bagan “**Performance analysis of lossless compression techniques based on JPEG standards**”, presented on 9<sup>th</sup> international conference on science and innovative engineering, year 2019.
6. Gowthami.V, Dr.K.Bhoopathy Bagan “**An efficient near-lossless compression method for medical images**”, presented on 7<sup>th</sup> international conference on contemporary engineering and technology, year 2019.

7. Gowthami.V, Sasti Krithiga “**An efficient joint watermarking method for medical images**” presented on 7<sup>th</sup> international conference on contemporary engineering and technology, 2019.
8. Gowthami.V,Agalya.S “**Lossless compression of medical images for telemedicine application**” presented on 8<sup>th</sup> international conference on science and innovative engineering,2018.
9. Gowthami.V,Sinduja.M, “**Embedded lossless compression of depth hints in JPEG images**” presented on 4<sup>th</sup> international conference on science engineering and technology,2018.
10. Gowthami.V, “**Outdoor light monitoring using embedded systems**” presented on 2<sup>nd</sup> international conference on recent trends in engineering and technology, 2017.
11. Gowthami.V, Dr.R.Ganesan, “**Multisensor Data Fusion for monitoring the contaminated water using enhanced MAP algorithm**” presented on International conference ICIET, 2014.

### **Other International Journal Publications**

1. Gowthami V , Mejalín Arno B, Vinothagan J, Arun Kumar R, ‘**Smart Assistive System for the Visually Impaired**’ Published in International Journal of Engineering Technology and Management Sciences (IJETMS), DOI: 10.46647/ijetms.2023.v07i04.014 ISSN: 2581-4621, Vol-07, Issue-04 July-August 2023.
2. Gowthami.V, Neelisetty Nikith, Anand Sai, Kumaravel, ‘**Handwriting text recognition using neural networks**’, International Research Journal of modernization in Engineering Technology and Science, IRJMETS, 2022.
3. V.Gowthami Sneha G “**Melanoma Detection Using Recurrent Neural Networks**”,Presented on International conference on Automation , signal processing , instrumentation and control ICASIC-2020.
4. Mrs V.Gowthami Sujeetha Y “**Region Based Medical Image Compression for Telemedicine Application**”, International conference on contemporary engineering and technology -2020.
5. Gowthami.V, Dr.K.Bhoopathy Bagan “**Performance analysis of lossless compression techniques based on JPEG standards**”, presented on 9<sup>th</sup> international conference on science and innovative engineering, year 2019.
6. Gowthami.V, Dr.K.Bhoopathy Bagan “**An efficient near-lossless compression method for medical images**”, presented on 7<sup>th</sup> international conference on contemporary engineering and technology, year 2019.
7. Gowthami.V, Sasti Krithiga “**An efficient joint watermarking method for medical images**” presented on 7<sup>th</sup> international conference on contemporary engineering and technology, 2019
8. Gowthami.V, Agalya.S “**Lossless compression of medical images for telemedicine application**” Published in International Journal of Science and Innovative Engineering & Technology (IJSIET).
9. Gowthami.V,Sinduja.M, “**Embedded lossless compression of depth hints in JPEG images**” Published in IAETSD Journal for Advanced Research in Applied Sciences.
10. Gowthami.V, “**Outdoor light monitoring using embedded systems**” Published in International Journal of Pure and Applied Mathematics.
11. Gowthami.V, Dr.R.Ganesan, “**Multisensor Data Fusion for monitoring the contaminated water using enhanced MAP algorithm**” Published in International Journal of Innovative Research in Science, Engineering and Technology.

### Programs Attended:

- Attended one day webinar titled “**Exploring the Latest Breakthroughs in Analog & RF IC Research: Insights from the Eindhoven University of Technology**” by Dr. Peter Baltus, organized by IEEE-IISc VLSI Chapter on July 19, 2023
- Attended 6 days Faculty Empowerment Programme on “**Recent trends in Electronics, Signal Processing and Networks**” conducted in physical mode by Department of Electronics Engineering at Madras Institute of Technology from **6<sup>th</sup> Feb 2023 to 11<sup>th</sup> Feb 2023**.
- Attended 6 days Faculty Empowerment Programme on “**Powering IoT using Raspberry pi or Arduino**” conducted in physical mode by Department of Electronics and Communication Engineering at College of Engineering Guindy from **30<sup>th</sup> Jan 2023 to 4<sup>th</sup> Feb 2023**.
- Attended 2 days workshop on “**Fundamentals on IOT (Idea to Implementation)**” conducted in physical mode by Department of Electronics Engineering at Madras Institute of Technology on 17<sup>th</sup> and 18<sup>th</sup> Nov 2022.
- AICTE Training and Learning (ATAL) Academy **Online FDP on Research Methodologies and Design Thinking for Leadership, Excellence and Soft Skills**, June 2021.
- AICTE Training and Learning (ATAL) Academy Online FDP on **Medical Image Processing and 3D Applications**, July 2021.
- AICTE Training and Learning (ATAL) Academy Online FDP on **Innovation in Telemedicine in Rural India enabled by advancements in Artificial Intelligence, Medical Devices and Internet of Things**, June 2021.
- Attended FDP on “**Machine learning for signal processing**” Conducted by Sri Venkateswara College of engineering from 19<sup>th</sup> -23<sup>rd</sup> May 2020.
- Participated in webinar “**Distributed Temperature Sensing for real time power line monitoring for Raman scattering in optical fibers**” organized by SRM institute of Science & Technology on 16<sup>th</sup> may 2020.
- Attended FDP on “**Advanced C++**” organized by School of Computer Science and Engineering, VIT, Chennai on 13<sup>th</sup>-14<sup>th</sup> May 2020.
- Attended research oriented two day faculty development training programme under UGC on “**Research challenges in VLSI and Communications**” Conducted by Department of Electronics Engineering at Madras Institute of Technology on 6<sup>th</sup> and 7<sup>th</sup> Feb 2020.
- Attended training Program on “**CS 8494 – Software Engineering**” conducted by Department of IT, MIT, Chennai from 16<sup>th</sup> to 20<sup>th</sup> Dec 2019.
- Two days National Level Seminar on “**IoT for Automation**” during **26<sup>th</sup> and 27<sup>th</sup> September 2019**.
- One Day FDP on “**Pedagogy**” held on **26<sup>th</sup> June 2019**
- FDP entitled “**Foundation Program in ICT for Education**” from 8 March 2018 to 12 April 2018 conducted by IIT Bombay.
- FDP entitled “**Pedagogy for Online and Blended Teaching-Learning Process**” from 3 May 2018 to 30 May 2018 conducted by IIT Bombay.
- FDP entitled “**Induction Program for Students**” from 18 June 2018 to 29 June 2018 conducted by Anna University.
- Hands on workshop entitled “**Programming Embedded System**” held on 9 and 10 March 2018 at MIT, Anna University, Chennai

- Attended 1 week Faculty Development Programme on “**EC6303-Signals and Systems**” in Madras Institute of Technology, Chennai
- Attended 3 days hands on training on “**Image processing and deep learning concepts**” in Madras Institute of Technology, Chennai
- Attended 2 weeks workshop on “**Cmos And VLSI Mixed Signal Processing**” in Madras Institute of Technology, Chennai
- Attended workshop on “**Virtualization-VM ware and Photoshop**” in Indian Institute of Technology, Chennai
- Attended a workshop on “**MSP 430 MICROCONTROLLER**” by Texas Instruments
- Attended one day international seminar on Overseas Education Avenues organized by Anna University of Technology, Madurai on 25<sup>th</sup> July,2011.
- Participated and Presented Paper in National Level technical Symposium “**EQUIFEST 2K11**”, organized by Department of computer science and Engineering, Sethu Institute of Technology.