

Mrs. B.Sucharitha

- Assistant Professor
- Qualification : B.Tech(ECE),M.Tech(SSP),(Ph.D)
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Experience

18

Area of Expertise:

Digital Signal Processing, Digital Image Processing, Python Programming and Applications, Linear Integrated Circuits and Applications, Networks and Transmission Lines, Basic Circuit Analysis, Electronics and Devices.

Research Interest:

Image Processing-Hyper Spectral Images

Membership Details :

IEEE Member
IETE Member

Paper Publications:

National Conferences:-

1. “Digital Watermarking: Image authentication using modified canonical technique”, National conference on circuits, signals and systems (NCCSS_15) organized by ECED, MJCET Hyderabad – 22-24 Jan 2015.

International Conferences:-

1. “Medical Image Compression Using Fractal Coding and Daubechies Wavelet Transform”, International Conference On Advances In Electronics And Communication Engineering on 9th july,2019.(Accepted as journal also).
2. “Image Segmentation techniques and optimization algorithms for Lung cancer”, International Conference on Advances in Signal processing and Communication Engineering (ICASPACE) held during 29-31st July 2021, MGIT, Hyderabad.
3. “Hybrid Compression method for Hyper spectral images using Singular value Decomposition and Discrete wavelet Transform”, 2021 IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT). DOI 10.1109/ICISSGT52025.2021.00032
4. B. Sucharitha and K. Anitha Sheela, "Hyper Spectral Image compression using Higher Order Orthogonal Iteration Tucker decomposition," *2022 IEEE 19th India Council International Conference (INDICON)*, Kochi, India, 2022, pp. 1-7, doi: 10.1109/INDICON56171.2022.10040093.

International Journals :-

1. “Hyper Spectral Image Compression Using Fractal Compression with Arithmetic and Huffman Coding”, Journal of Emerging Technologies and Innovative Research (JETIR) © 2019 JETIR June 2019, Volume 6, Issue 6 www.jetir.org (ISSN-2349-5162)(Published in conference also).
2. Feature Extraction of Hyper spectral Images , Journal of Emerging Technologies and Innovative Research (JETIR)© 2022 JETIR October 2022, Volume 9, Issue 10.
3. Hyper spectral Image Compression & Classification: A Survey, Journal of Remote Sensing & GIS(JORSG), 2022, Volume 13
4. Compression of Hyper Spectral Images using Tensor Decomposition Methods, International Journal of Circuits, Systems and Signal Processing, E-ISSN: 1998-4464, Volume 16, 2022, Art. #138

Book Chapter:

1. Precision farming using image processing and machine learning [Naaz, A.](#), [Sucharitha, B.](#) Artificial Intelligence Applications in Agriculture and Food Quality Improvement, 2022, pp. 55–73.

Awards:-

1. Received 1st prize for the project titled “Control of Wheel chair using Hand Gestures “, Anveshana-2014 in association with Synopsis (Prize Amount: 35000/-)

Participated Conferences:-

1. International Conference TSE 17 Technologies for Sustainable Ecosystem from 23rd & 24th March 2017 conducted by MJCET.
2. International Conference TSE 17 Technologies for Sustainable Ecosystem from 25th & 26th February 2016 conducted by MJCET.

Conducted Workshops:-

1. Signal Processing and Communication, organized by MJCET from 25th January to 11th February 2021.
2. One day workshop on “ Signal processing using python through raspberry PI” organized by ECED,MJCET on 25th Jan **2020**.

Workshop Attended:-

1. Three state wide workshop on “ Microelectronics and IC design “ from 22nd to 24th December **2005**, organized by the ECED, MJCET , Banjarahills , Hyderabad ,AP, India.
2. One day workshop on Image and Speech processing “ held on 13th December **2008** at IIT Hyderabad.
3. Three day National Level workshop on “ Recent Trends in VLSI Design “ organized by ECED, MJCET , Hyderabad from 18th -20th March,**2010**.
4. One day workshop on “Programmable System o Chip (PSoc3)” conducted by the ECED,MJCET in association with Phlox semiconductor Pvt.L td, Bangalore on 22nd December , **2010**.

5. Two Day workshop on “ System On Chip(SOC) design held on 17th and 18th August **2013**, organized by IEEE CAS/EDS joint chapter- Hyderabad section in association MJCET.
6. Two Day workshop on “Graphical System Design with Lab VIEW “ held during 20-21 Oct **2016** at JNTUH, Hyderabad.
7. Participated in CAS Ph.D. forum organized by IEEE CAS/EDS societies , Hyderabad section on 16 July 2016.
8. 3-Day hands on workshop on “setup of Internet of things (IOT) lab conducted from 25-27 March **2019** by SIG on IOT in collaboration with ECED, MJCET.
9. One day workshop on “ Signal processing using python through raspberry PI” organized by ECED,MJCET on 25th Jan **2020**.
10. One day workshop on “Innovation and Design Thinking “ on 1st Feb **2020** organized by IEEE technology and Engineering management society chapter in collaboration with IEEE MJCET student branch, Hyderabad.
11. Image Compression with k-means clustering (project) authorized by Rhyme and offered through Coursera completed on 15/05/2020.
12. Computer vision – Image basics with opencv and python authorized by Rhyme and offered through Coursera completed on 13/05/2020.
13. A two- Day virtual workshop on “ LaTeX organized by Hyderabad Deccan ACM Chapter on 24th and 25th June,2020.
14. A Workshop on Computer vision and machine learning using opencv from 15/06/2020 to 17/06/2020 hosted by ECE, Panimalar Institute of Technology & Pantech E-Learning.
15. 3-Way FDP on “ The Way to Publish the Papers in SCI index Journals”, organized by ECE, RGM CET, Nandyal held on July 6th -8th 2020
16. Video basics with opencv and Python authorized by Rhyme and offered through Coursera completed on 15/01/2020.
17. “ Artificial Intelligence in Remote Sensing Applications 21-23 October 2021. Organized by IEEE CIS/GRSS chapter Hyderabad Section in collaboration with MJCET and Geethanjali college of Engineering and technology, Hyderabad.

Faculty Development Programs: -

1. **One week** Course on “ **Advance Embedded Systems** “ from 30th Nov to 5th Dec, **2009** organized by the department of computer science and Engineering, MVSR Engineering College, Nadargul.
2. **Two week** ISTE workshop on “**Basic Electronics**” conducted by IIT Bombay from 28th June to 8th July **2011** under the National mission on Education through ICT (MHRD).
3. **Two week** ISTE workshop on “**Analog Electronics**” conducted by IIT kharagpur from 4th to 14th June **2013** under the National mission on Education through ICT (MHRD).
4. **Two- week** ISTE STTP on “**Signals & Systems** “ conducted by IIT Bombay from 2nd to 12th Jan **2014** under the National mission on Education through ICT (MHRD).
5. **Two- week** ISTE STTP on “**Technical communication** “ conducted by IIT Bombay from 8th Oct to 6th Dec **2015** under the National mission on Education through ICT (MHRD).
6. **Two-week** ISTE STTP on “**CMOS , Mixed Signal and Radio frequency VLSI Design**” conducted by IIT Kharagpur from 30th Jan 2017 to 4th FEB **2017**.

7. **One week FDP on “BIG data Analytics and Deep leaning** “organized by Computer science & Engineering Department in collbration with compute society of india (CSI), hyderabad from 03-08 JAN **2018** at MJCET, Hyderabad
8. **One-week FDP on “ Data Science Technologies & Next generation Artificial Intelligence** “ organized by Computer science & Engineering Department in collbration with compute society of india (CSI), hyderabad from 03-08 JAN **2019** at MJCET, Hyderabad.
9. **NPTEL Online Course** Completed the course “ **Digital Image processing**” on Jul to OCT 2018.
10. **One week** Faculty Development Program on “**AI Applications in Power Electronics Systems (AAPES-20)**” organized by Electrical Engineering Department, Muffakham Jah College of Engineering and Technology, Hyderabad,**2019** .
11. **Five Days Training on” AI for COVID-19 Data analysis & Deep Learning Applications ”, organized by Team Edux Labs,2020.**
12. **NPTEL Course Python for Data Science** : score-80%
13. **6 – week “Crash Course on python “** authorized by **Google** and offered through Cousera completed on 06/05/2020.
14. **“ MATLAB Masters”**, Course conducted by Data Tech Labs from 05/06/2020 to 19/06/2020.
15. **“ Neural Networks and Deep Learning”** , authorized by deeplearning.ai and offered through Cousera completed on 06/05/2020.
16. **5-Days FDP on “ AI for COVID-19 data analysis & Deep Learning”** from 20th April to 24th April 2020 organized by Edux Labs.
17. **ATAL** online Elementary FDP on “ **Rcent Advances**” in Signal Processing “ from 02/08/2021 to 06/08/2021 at JNTU Kakinada.
18. **ATAL** online Elementary FDP on “ **Hyper Spectral remote sensing and its applications** “ from 06/09/2021 to 10/09/2021 at CMR Institute of technology.
19. **FDP on “Advanced Signal Processing , Communication using AI and ML techniques”** jointly organized by Department of ECE of GMR Institute of Technology and Sri Sairam Institute of Technology from 21st to 25th March,2022.
20. **One week FDP on “ Data Science using Python Programming “ organized by ECE Department, MJCET** in collaboration with Delta Sigma Technologies from 07 March 2022 to 11 March 2022.
21. One week FDP on “ **Recent trends on IOT** “ from 06 June -10June 2022 organized by the department of Electronics and Communication Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.