



Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to **VTU**
Approved by **AICTE**
Accredited by **NAAC** with **A+** Grade
6 Programs Accredited by **NBA**
(CSE, ISE, ECE, EEE, MECH, CV)

FACULTY PROFILE ON WEBSITE

Faculty Name	Dr. SUMAIYA MN	
Academic Designation	Associate Professor	
Educational Qualification	Ph.D	
Experience in Teaching & Industry	23 &	
Date of Joining	18-8-2018	
Official Email ID	drsumaiyamn@dsatm.edu.in	
Employee ID	180434	

Teaching Experience	Research Experience	Journal Publications	Conference Publications
20years	5years	24	21
Books Published	Funded Projects completed	Patent Grant/published	Events Coordinated
4	1	1/9	20
Scopus/WOS/SCI 16/9/6	Peer-Reviewed	Workshop/FDP/Seminar Attended	Citations/h index/ i10index
	50	45	191/6/5

Academic Identity



Google Scholar
Profile

<http://scholar.google.com/citations?user=k9KCRyAAAAAJ&hl=en>



Orcid Profile <https://orcid.org/my-orcid?orcid=0000-0002-8407-2401>



Publons Profile <https://publons.com/dashboard/summary/>



Web of Science Researcher ID - U-1712-2019



ResearchGate Profile <https://www.researchgate.net/profile/Sumaiya-Mn>



Linkedin Profile <https://in.linkedin.com/in/dr-sumaiya-mn-14541268>



Dblp scholar Profile <https://dblp.org/pid/187/6165.html>



Semantic Scholar <https://www.semanticscholar.org/author/M.-N.-Sumaiya/3472822>

Educational Details

- ✓ Ph.D , Jan. 2018 at Anna University.
- ✓ M.E., done at Anna University, 2004.
- ✓ B.E., done at Madurai Kamaraj University.

Personal Details

- Hobbies: Reading stories, articles
- Languages Known: English, Tamil

Professional Experience

- DSATM, Bangalore, Associate Professor Aug. 2018 – till date
- Researcher in Department of ECE, Mepco Schlenk Engineering college, Sivakasi from Jan. 2014 to 2017.
- HKBK College of Engineering, Bangalore Asst. Professor Jan. 2008- Aug. 2012
- PSR Engineering College, Sivakasi Lecturer Oct' 2004 to Nov' 2007
- Velammal Engineering College, Chennai Lecturer June '2004 – Oct' 2004

Publications

International Journals:

1. M. N. Sumaiya and R. Shantha Selva Kumari, "Logarithmic Mean-Based Thresholding for SAR Image Change Detection," in *IEEE Geoscience and Remote Sensing Letters*, vol. 13, no. 11, pp. 1726-1728, Nov. 2016, doi: 10.1109/LGRS.2016.2606119. IF-4.8, SCI, Scopus Indexed-87 citations

2. M.N. Sumaiya, R. Shantha Selva Kumari, Gabor filter based change detection in SAR images by KI thresholding, Optik, Volume 130, 2017, Pages 114-122, ISSN 0030-4026, <https://doi.org/10.1016/j.ijleo.2016.11.040> ,IF- 3.1. SCI, Scopus Indexed- 40 citations
3. M.N. Sumaiya, R. Shantha Selva Kumari, "SAR image despeckling using heavy tailed Burr distribution", Signal, Image and Video Processing, International Journal, Springer, 11 (1), Jan.2017, 49-55, *Impact factor* – 2.157, SCI, Scopus Indexed – 10 citations
4. M.N. Sumaiya, R. Shantha Selva Kumari, "Comparative study of statistical modeling of wavelet coefficients for SAR image despeckling", International Journal of Wavelets, Multiresolution and Information Processing (IJWMIP), World Scientific, 15 (1), 2017, 1750003 (18pages), *IF*-1.403. SCI, Scopus Indexed -4-citations
5. M.N. Sumaiya, R. Shantha Selva Kumari, "Satellite Image Change Detection using Laplacian-Gaussian Distributions", Wireless Personal Communications- An International Journal- Springer, 97 (3), Dec. 2017 ,4621–4630, *IF*-1.671, SCI, Scopus Indexed- 2 citations
6. M.N. Sumaiya, R. Shantha Selva Kumari, "Unsupervised Change Detection of Flood affected areas in SAR Images using Rayleigh based Bayesian Thresholding", IET Radar, Sonar & Navigation, 12(5), 515 - 522 , April 2018, *IF* – 1.908, SCI, Scopus Indexed- 14 citations
7. Book Title: Human Behaviour Analysis Using Intelligent Systems; Chapter title- Human Emotion Classification Using EEG Signals by Multivariate SynchroSqueezing Transform ISBN:978-3-030-35138-0, Chapter NO. 9, Vol.6, 2019, Springer, 3 **citations**
8. Smart Robotic Arm Based Waste Segregation System", International Journal of Science, Engineering & Management, Vol.5, Issue 1, Jan. 2020.
9. "Water Quality Assessments Using Remote Sensing Images and Analog Sensors", Journal of Remote sensing GIS and Technology, Vol.6, Issue 2, June. 2020.
10. "A Survey on Different Modulation Techniques in Satellite Miniature Technology", Journal of Telecommunication Study, vol.5, Issue 2, June 2020.
11. "Automatic Movable Smart Road Dividers- IOT based solution to Traffic Congestion problems", International Journal of Innovative science and Research Technology, Vol.5, Issue 6, June 2020, ISSN: 2456-2165
12. "Literature Survey on Student Grade Calculation using Optical Character Recognition based Image Processing Techniques", Journal of VLSI Design and Signal Processing, e-ISSN: 2581-8449 Volume-7, Issue-1 (January-April, 2021).
13. Comparative Study on Artificial Intelligence Based Real Time Voice Augmentation Applications, Journal of VLSI Design and Signal Processing (e-ISSN: 2581-8449), Vol 7, No 1 (2021).
14. Automatic Number Plate Recognition for Intelligent Transport System, Journal of Image Processing and Artificial Intelligence, e-ISSN: 2581-3803, Volume-7, Issue-3 (September-December, 2021), pp-24-30.
15. Face Recognition Based Unsupervised Attendance File Generation Using Local Binary Pattern Histogram, Journal of VLSI Design and Signal Processing (e-ISSN: 2581-8449), Volume-7, Issue-3 (September-December, 2021), pp-28-35.
16. Sumaiya MN1*, Anuradha Dixit2 , Chaitra B P2 , Jalla Swathika2 , Kavya A J, Machine Learning based Anesthesia Controlling System for Medical Applications, Journal of Image Processing and Artificial Intelligence, e-ISSN: 2581-3803 Volume-8, Issue-1 (January-April, 2022), <http://matjournals.co.in/index.php/JOIPAI/index>
17. Vachanamruth GS1 , Vaishnavi Naveen1 , Varshitha C 1 , Yashaswini VP1 , Sumaiya MN2, Literature Survey on Physiotherapy Assessment Using ESP32 and Memes Technology Based IMU Sensor as a Wearable Sleeve, Journal of VLSI Design and Signal Processing, e-ISSN: 2581-8449 Volume-8, Issue-1 (January-April,

- 2022).<http://matjournals.co.in/index.php/JOVDSP>
18. Sumaiya M N1* , Prajwal K2 , Rao Shravan Vasudev2 , Shreya K A2 , Thrishul R 2 , R Manjunath Prasad, Comparative Analysis of Concrete Crack Detection using Image Processing and Artificial Intelligence, Journal of Image Processing and Artificial Intelligence, e-ISSN: 2581-3803 Volume-9, Issue-1 (January-April, 2023), <https://doi.org/10.46610/JOIPAI.2023.v09i01.002>
 19. R. Manjunath Prasad1 , Shamashyadabegum M Naikodi2 , Triveni A 2 , Yeruri Sai Gireesh2* , Tejas Prakash2 , Sumaiya M N, Survey on Non-Invasive Blood Group Detection Using Image Processing, Journal of VLSI Design and Signal Processing, e-ISSN: 2581-8449 Volume-9, Issue-1 (January-April, 2023); <http://matjournals.co.in/index.php/JOVDSP/article/view/1551>, <https://doi.org/10.46610/JOVDSP.2023.v09i01.002>
 20. R. Manjunath Prasad, Sumaiya M N, Shamashyadabegum M Naikodi, Triveni A, Yeruri Sai Gireesh, Tejas Prakash, Non-Invasive Blood Group Detection Using CNN, Journal of Trends in Research and Development (IJTRD), e-ISSN: 2394-9333 June-2023, Volume-10, Issue-3, <http://www.ijtrd.com/papers/IJTRD26894.pdf>
 21. Akshay Kalash1* , Lakshmish T.G2 , Koritala Gopi Chowdary3 , Kavya N Pujari4 , Sumaiya M N5, A Study on Hybrid-GWO Algorithm-based PID Controller for Quadcopters, Journal of Soft Computing and Computational Intelligence, Vol. 1, Issue 1 (January – April, 2024) pp: (1-6), <https://matjournals.net/engineering/index.php/JoSCCI/article/view/65>
 22. Sumaiya MN , Keerthy S , Harshith V, Abhijith B M, Gaurav B, Underwater-Communication using IR LED, International Journal of Advanced Research in Science, Communication and Technology, 5(10), 525-530, DOI: 10.48175/IJAR SCT-25677.
 23. Sumaiya M N, Tripathi Y, Trisha G, Trisha E and Zakiya Khanum, "**Automated Watering for Home Gardens: Arduino-Based Smart Irrigation Solution**", Published in International Journal of Trend in Research and Development (IJTRD), ISSN: 2394-9333, Volume-12 | Issue-2, April 2025, 285-288, URL: <http://www.ijtrd.com/papers/IJTRD28707.pdf>
 24. M. N. Sumaiya, S. Bharadwaj, R. H. Rachana, S. Spandanar, and S. Banu, "Smart safety cum fitness band for women," ECTI Transactions on Electrical Engineering, Electronics, and Communications, vol. 23, no. 3, Oct. 2025. <https://doi.org/10.37936/ecti-eec.2525233.258636>, ISSN- 1685-9545

Book Chapter:

1. Book Title: Human Behaviour Analysis Using Intelligent Systems; Chapter title- **Human Emotion Classification Using EEG Signals by Multivariate SynchroSqueezing Transform** ISBN:978-3-030-35138-0, Chapter N0. 9, Vol.6, 2019, **Springer, 4 citations**
2. **M.N. Sumaiya, J. Vineeth, Prashanth Sali, G.R. Supreeth, R. Supreeth**, Chapter 8 - Intelligent autopilot fire extinguishing robot, Editor(s): D. Jude Hemanth, Brij B. Gupta, Mohamed Elhoseny, Swati Vijay Shinde, In Intelligent Data-Centric Systems, Intelligent Edge Computing for Cyber Physical Applications, Academic Press, 2023, Pages 129-149, ISBN 9780323994125, <https://doi.org/10.1016/B978-0-323-99412-5.00002->
3. Sumaiya, M.N., Sreekanth, B.V., Akash, U.S., Kala, A.S., Dharanendra Gowda, G.M. (2023). Real-Time Human–Machine Interaction Through Voice Augmentation Using Artificial Intelligence. In: Chaurasia, M.A., Juang, CF. (eds) Emerging IT/ICT and AI Technologies Affecting Society. Lecture Notes in Networks and Systems, vol 478. Springer, Singapore. 25th August, 2022. https://doi.org/10.1007/978-981-19-2940-3_10.

pp:147-160; ISSN 2367-3370, ISBN 978-981-19-2940-3

4. **M. N. Sumaiya, G. S. Vachanamruth, N. Vaishnavi, C. Varshitha, and V. P. Yashaswini**, "Wearable sleeve for physiotherapy assessment using ESP32 and IMU sensor," in Computational Intelligence and Deep Learning Methods for Neuro-Rehabilitation Applications, Elsevier, Jan. 2024, pp. 101–119<https://doi.org/10.1016/B978-0-443-13772-3.00002-9,pp-101-119>,.

International Conferences:

1. "Design of QMF using WLS method", International conference-ICISPR'04, Feb.2004, 1, Pg:57.
2. "Optimization Approach for designing QMF", National Conference-NCICCA'05, April.2005, 1, Pg:168-171.
3. "Efficient Optimization Design of QMF", National Conference-NACTECIT'09, May.2009, 1.
4. "DTCWT Based SAR Image Despeckling Using Multivariate Statistical Theory", International Conference-ICCCIT'12, June.2012, 1, Pg:58-61.
5. "Image Despeckling Using Statistical Modeling and Hybrid Thresholding", International Conference-ICMCBIR'12, July.2012, 3, Pg: 16.
6. "Performance Measures of Image Despeckling Using Statistical Modeling and Hybrid Thresholding", International Conference-ICCTEM'12, July.2012, 1, Pg: 13.
7. "Unsupervised Edge Enhancement algorithm for SAR images using exploitation of Wavelet Transform Coefficients", IEEE International Conference-ICCNT-2014, Dec.2014, 1, Pg:52, **3 citations (Scopus Indexed)**.
8. "CETM: A Cost Effective Traffic Management to enhance IOT driven 5G Communication Systems", International Conference on Electronics, Communication and Aerospace Technology ICECA-2019", 12-14 June 2019, Hotel Arcadia- RVS group of Institutions, Coimbatore. **(Scopus Indexed)**.
9. Crack Detection and classification using deep Learning models, IETE International Conference India (IICI-23), organized by IETE Bangalore centre in association with BEL & C-DOT at Bangalore, 3-5 May 2023. **(Scopus Indexed)**.
10. Sumaiya MN et.al, An Integrated Sensor-Based Machine Learning System for Predicting Crops and Fertilizers. 2025 IEEE 22nd India Council International Conference (INDICON) | 979-8-3315-9031-4, DOI: 10.1109/INDICON68490.2025.11392969, Dec.2025. **(Scopus Indexed)**.
11. Sumaiya MN et.al, Real-Time Smart Energy Meter with Sensor-Based Monitoring and In-Device Payment Capability, 2026 International Conference on Electric Power and Renewable Energy (EPREC)| IEEE | DOI: 10.1109/EPREC66546.2026.11412275, March.2026. **(Scopus Indexed)**.
12. Sumaiya MN et.al, "A Digital Twin-Enabled Framework for Critical Health Monitoring using Wireless Sensor Networks and Machine Learning," 2026 7th International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, India, 2026, pp. 198-203, doi: 10.1109/ICIRCA69024.2026.11570526.**(Scopus Indexed)**.
- 13.

National Conferences:

1. "Waste Segregation using smart Robotic ARM", National Conference on Convergence of Science, Technology and Management NCCSTM- 2019", 10th May 2019 at DSATM.
2. "Static Object & Human Detection using Deep Learning with RF controlled UGV", National Conference on Convergence of Science, Technology and Management NCCSTM- 2019", 10th May 2019 at DSATM.

3. "Waste Segregation using smart ARM" in the National Conference on Convergence of Science, Technology and Management NCCSTM-2019, held on 10th May 2019 at DSATM, Bangalore.
4. "Static object & Human detection using Deep learning with RF controlled UGV" in the National Conference on Convergence of Science, Technology and Management NCCSTM-2019, held on 10th May 2019 at DSATM, Bangalore.
5. "IOT Deployed Automatic Movable Smart Road Dividers To Aovid Traffic Problems" in the National E-conference on NCCSTM-2020, held on 27th May 2020 at DSATM, Bangalore.
6. "Water Quality Detection Using Remote Sensing Images and IOT", in the National E-conference on NCCSTM-2020, held on 27th May 2020 at DSATM, Bangalore.
7. "Automation of Student Grade Calculation Using OCR, Image Processing Techniques and Cloud Computing", in the National E-conference on NCCSTM-2021, held on 10th July 2021 at DSATM, Bangalore.
8. "Real Time Interactive Voice Augmentation Using Artificial Intelligence and Audio Processing", in the National E-conference on NCCSTM-2021, held on 10th July 2021 at DSATM, Bangalore.
9. "Machine Learning Based Anesthesia Controlling System for Medical Applications", in the National E-conference on NCCSTM-2022, held on 28th June 2022 at DSATM, Bangalore.
10. "Physiotherapy Assessment Using Esp32 And Mems Technology Based IMU Sensor as a Wearable Sleeve", in the National E-conference on NCCSTM-2022, held on 28th June 2022 at DSATM, Bangalore.
- 11.

Awards

- Gold Medalist in DECE
- 20 Lakhs VGST KFIST L1 Funded Project.
- Best Academic Performer at DSATM during the years 2020-21, 2021-22, 2022-23.
- Guided project titled Agri-Invest App for Vishwakarma Awards 2021- shortlisted for South-West Regional level Convention
- Best Academic Performer of the year 2021 & 2022 at DSATM.

Academic Activity

- **List of journals Reviewed:**
- Reviewed a paper for IEEE Geoscience and Remote Sensing.
- Reviewed a paper for IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing.
- Reviewed a paper for Elsevier Optik- International journal for Light and Electron Optics.
- Reviewed a paper for Taylor & Francis International Journal for Remote Sensing and Remote Sensing Letters.
- Reviewed a paper for SPIE Optical Engineering.
- Reviewed a paper for IJPRAI –International Journal of Pattern Recognition and Artificial Intelligence.
- Reviewed 15 papers for IEEE sponsored International Conference ICATIECE-2019.
- Reviewed a paper for Taylor & Francis International Journal for Remote Sensing (2019).

- Reviewed a paper for Taylor & Francis Remote Sensing Letters (2019).
- Reviewed a paper for International Journal of Wavelets, Multiresolution and Information Processing, World Scientific(2019).
- Reviewed a paper for Defense Science Journal (2019).
- Reviewed a paper for IET Image Processing and added in publons (2020).
- Reviewed a paper for IEEE Transactions on Geoscience and Remote Sensing (2020)
- Reviewed a paper for Taylor & Francis International Journal for Remote Sensing (2020)
- Reviewed a revised paper for IEEE Transactions on Geoscience and Remote Sensing (2021)
- Reviewed a revised paper for Taylor & Francis International Journal for Remote Sensing (2021)
- Reviewed a paper for MAT journals (2021)
- Reviewed a paper for Defense Science Journal (DSJ) (2021).
- Reviewed a revised paper for Taylor & Francis International Journal for Remote Sensing (Sep.2021)
- Reviewed two papers for Taylor & Francis International Journal for Remote Sensing (Oct.2021)
- Reviewed a revised paper for Electronic Letters (Oct.2021)
- Reviewed a revised paper for Taylor & Francis International Journal for Remote Sensing Letters (Feb.2022)
- Reviewed a paper for IEEE Geoscience and Remote Sensing Letters (may 2022).
- Reviewed a paper for MAT journals.
- Reviewed a paper for Taylor & Francis International Journal for Remote Sensing Letters (2022)
- Reviewed a revised paper for MAT Journal of Image Processing and Artificial Intelligence (November.2022)
- Reviewed a revised paper for Taylor & Francis International Journal for Remote Sensing Letters (Jan.2023)
- Reviewed a paper for Taylor & Francis International Journal for Remote Sensing Letters (March.2023)
- Reviewed a revised paper for Taylor & Francis International Journal for Remote Sensing Letters (March.2023)
- Reviewed a paper for MAT Journal of Image Processing and Artificial Intelligence (April.2023)
- Reviewed a paper for Taylor & Francis International Journal for Remote Sensing Letters (August.2023)
- Reviewed a paper for IET Image Processing and added in publons (Nov.2023).
- Reviewed a paper for Advances in Space Research and added in publons (Nov.2023).
- Reviewed a paper for IEEE Transactions on Geoscience and Remote Sensing (march, 2025)
- Reviewed a revised paper for IEEE Transactions on Geoscience and Remote Sensing (march, 2025)
- Reviewed a revised paper for International Journal of Intelligent Transportation Systems Research –IJIT-(sep.2025)

Editorial Board Member:

1. Serving as Editor in Journal of VLSI Design and Signal Processing (e-ISSN: 2581-8449); <https://matjournals.com/Editorial-Journal-of-VLSI-Design-and-Signal-Processing.html>
2. Serving as Editor in Journal of Image Processing and Artificial Intelligence (e-ISSN:

2581-3803);<https://matjournals.com/Editorial-Journal-of-Image-Processing-and-Artificial-Intelligence.html>

Faculty Development Activity

1. Two days State level workshop on 'Digital Signal Processors', August 2006.
2. One Day workshop on 'ORCAD PSPICE', December 2004.
3. Workshop on "Train The Trainer" on VHDL on January 2009.
4. Six Days Workshop "Highly Impact Teaching Skills" conducted by WIPRO under Mission 10X programme.
5. Two days technical seminar on "Recent Trends in Pattern Recognition and Machine Learning Techniques" on September 19-20 at NMIT Bangalore, 2014.
6. One Day Workshop on "Research Enhancement" on 2nd July 2015.
7. TEQIP sponsored Two Days National Workshop on "SAR (Synthetic Aperture Radar) Image Processing, at Thiagarajar College of Engineering on 7th & 8th August 2015.
8. TEQIP-3 sponsored Two days workshop on "Advanced Multi Domain System Modelling using OpenModelica", on 26 & 27 November 2018 at EEE/ EIE Dept. of BMSCE.
9. One day Seminar on "Developing and Deploying Deep Learning Algorithms using MATLAB" at Concord Hotel, Bangalore organized by MATHWORKS on 29 November, 2018.
10. Five Day FDP program on "Embedded Systems Designs, IOT & IOT Security Protocols" at DSATM, Jan 16- 20, 2019, Bangalore.
11. Three Day NAAC workshop on 31st Jan-2nd FEB, 2019 @ DSATM.
12. One day Seminar on "Research Publications, Grants & IPR" by Technical Institute for Engineers on March 8th 2019.
13. Three day Training Programme on IPR with special focus on Prior Art Search at KSCST training center, IISc campus, Bangalore on 13th to 15th of June 2019.
14. Five Days FDP on "Graphical Programming, Data Acquisition and Hardware Programming using NI LabVIEW", 28th June – 2nd July at DSATM, Bangalore.
15. Three Days National Workshop on "Design and Development of Nano Satellite" from 3rd-5th July, 2019, at DSU, Bangalore in association with IEEE Bangalore section & Planet Aerospace, Bangalore.
16. Five Days FDP on "Artificial Intelligence - MLT & Deep Learning using LabVIEW", 28th January – 1st Feb. 2020 at DSATM, Bangalore.
17. One hour webinar on "Water Treatment Modeling Tools for Removing PFAS and Other Contaminants", April 29, 2020, EPA water research, US.
18. Webinar on "Data Science with Design Thinking Mindset", May 31st, 2020, IEEE, RITB, Ramaiah Institute of Technology, Bangalore.
19. Virtual FDP on "Neural Networks and Deep Learning using Python", held from 1st June to 5th June, 2020 at school of computing and information technology, Reva University, Bangalore.
20. Webinar on Overview of IPR and Journey of Patenting, 6th June, 2020 at Jyothy Institute of Technology, Bangalore.
21. Webinar on Satellite Image Processing- Feature Extraction, 27th June 2020, at Bangalore Technological Institute, Bangalore.
22. Online 3 days workshop on LATEX, 29th June 2020 to 1st July 2020, at AMC Engineering College, Bangalore.
23. Webinar on "How to write research papers and publish in International Journals", 9th July

2020, at Dr. Ambedkar Institute of technology, Bangalore.

24. Five days Online FDP on “Exposure & Rejuvenation of Technologies in Changed Era of the World”, July 6-10, 2020, at Raj Kumar Goel Institute of Technology, Ghaziabad, India.
25. Webinar on “Artificial Intelligence and Machine Learning : It’s Carrier prospects after Pandemic”, 17th July 2020, at Bangalore Technological Institute, Bangalore.
26. Webinar Series on "The Space Scientists - Mission Aditya", organized by the *Jansons Institute of Technology* and *Galileo Science Club* held on 22.07.2020.
27. Webinar Series on "The Space Scientists - Satellite for Public Health", organized by the *Jansons Institute of Technology* and *Galileo Science Club* held on 23.07.2020.
28. Webinar Series on "The Space Scientists - Big Questions About the Cosmos", organized by the *Jansons Institute of Technology* and *Galileo Science Club* held on 24.07.2020
29. Webinar Series on "The Space Scientists - "Astronomical Timekeeping : A Primer"", organized by the *Jansons Institute of Technology* and *Galileo Science Club* held on 25.07.2020.
30. Five Days Online Workshop on Emerging Trends in Robotics by Manipal Institute of Technology A Constituent Unit of Manipal Academy of Higher Education (MAHE), Manipal, Karnataka on 21-25, July 2020.
31. Five Days Virtual FDP on Skills and Opportunities in VLSI, from 27th July – 31st July, 2020 at DSATM, Bangalore.

2020-2021

32. 5 days FDP on “Signal Processing Applications” held from 21st to 25th Sept. 2020 organized by Department of Instrumentation & Electronics Engineering, College of Engineering and Technology (Autonomous), Bhubaneswar, Odisha.
33. Six Days Online Short Term Training Programme on "Intellectual Property for Engineers & Scientists, in AICTE, New Delhi under AQIS sponsored, from November 9th 2020, to November 14th 2020 @ CMRIT, Bangalore.
34. Six Days Online Short Term Training Programme on "Intellectual Property for Engineers & Scientists-phase 2, in AICTE, New Delhi under AQIS sponsored, from November 23rd 2020, to November 28th 2020 @ CMRIT, Bangalore.

2021-2022

35. 5 days FDP on “Future Advancements in the field of Telecommunication and Embedded System” held from 24th to 30th August 2021 organized by Department of Electronics & Communication Engineering, at Raj Kumar Goel Institute of Technology, Ghaziabad, India.
36. Five Days Virtual FDP on Microchip Training, from 24th September – 28th September, 2021 at DSATM, Bangalore.
37. Actively participated 4 days Faculty Immersion Programme (FIP) on Pedagogical Approaches, from April 1-4, 2022 at DSATM, Bangalore.
38. A webinar on “**Intellectual Property Rights**” on the occasion of “**Azadi Ka Amrit Mahotsav**” through Vigyan Utsav by KSCST in association with DST, GoI , on **3rd August 2022 @ 10.30 am -1.30 pm**
39. Participated in 2 days workshop entitled Advance workshop on IPR for KSCST associated IP cell coordinators held at KSIT on 23 to 24-02-2023.

2023-24

40. Five days FIP on “Empowered Teachers as the torch bearers and pedagogical leaders” by Dr. Pratima held at DSATM on 18-3-2024 to 22-3-2024
41. Five days FIP on Research from 22-4-2024 to 27-04-2024 at DSATM.
42. Two days FIP on Patent Drafting and Filing from 21-11-2024 to 22-11-2024 at DSATM.

2025-26

43. 'Frontiers of AI: An Interdisciplinary Journey from Fundamentals to Futuristic Innovations' of 40 hours duration, jointly organized by Indian Institute of Information Technology, Nagpur and the Electronics and ICT Academy (Phase-II), Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, during August 18-29, 2025.
44. Online Faculty Development Programme on 'Next Generation IoT Security: Architecture, Threats and Practical Defenses' of 40 hours duration organized by the Electronics and ICT Academy (Phase-II), Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, during October 6 - 16, 2025.
45. Completed Faculty Immersion Program on "AI for Educators" held between 22nd August 2025 to 26th August 2025 at DSATM campus in association with Smayan Foundation.

Course Certificates:

1. Programming for Everybody (Getting Started with Python) an online non-credit course authorized by University of Michigan and offered through Coursera.

Administrative Activity

1. IPR cell ECE Co-Ordinator 2018- till now
2. Final Year ECE Seminar Co-Ordinator 2018-2019.
3. Final Year ECE Project Co-Ordinator 2019-2020, 2020-2021
4. Associated as Advisor with Staff Selection Commission Interview Board at Office of the Regional Director, Staff Selection Commission, Kendriya Sadan, Bangalore..
5. Experienced as Chief Examiner and Examiner for Paper valuation for B.Tech, B.E courses of various universities.
6. Experienced as External Examiner for conducting the practical examinations for B.E and B.Tech courses.
7. Involved in various confidential work in Examination Branches of Anna University, VTU university and Dr. MGR university.
8. Involved in managing all the academic matters like helping in preparing college magazine, examination schedule, guiding student projects, preparing time table, organizing guest lectures, seminars, workshops etc.
9. Co-ordinated a technical talk on 'Space Communications- Telemetry, Tracking and Telecommand' by Mrs. Smitha KS, Deputy Project Director, ISRO, Trivandrum on 18th April 2019 for prefinal year students at ECE dept, DSATM.
10. Coordinated project Symposium at DSATM on 27-11-2019
11. One Day FDP on IPR organized at DSATM on October 2019.
12. Organized Webinar on IPR Towards Copyrights And Patent Filing on 2-5-2020
13. Co-ordinated National e-conference at DSATM On 27-5-2020 at department level
14. 3 Day FDP on "Converting Ideas into Patents" on 16th, 23rd and 29th August 2020 Organized by IPR Cell-DSATM in association with Embware Labs Pvt. Ltd, Bangalore.
15. Organized Online Guest Lecture has been conducted on "Deep Learning Workflows and Applications using MATLAB" By Mr. Rakshith B S, Senior Application Engineer, CoreEL Technologies, Bangalore. Date: 17-11-2020|Time:2-3PM, Link to join: <https://tinyurl.com/y684r7y3>, Platform: Microsoft Teams.
16. Coordinated project Symposium at DSATM on 19-12-2020

17. Co-ordinated One Day online workshop on Intellectual Property Rights, in association with Embware Labs Pvt. Ltd, Feb.13, 2021.
18. Co-ordinated one day Industry conclave with Industry Delegates at DSATM on 27th March 2021.
19. Co-ordinated webinar on Patent Portfolio Valuation on world Intellectual Property Day 1st May 2021, 12pm -1pm Organized by IPR Cell, IIC & IQAC -DSATM in association with Embware Labs Pvt. Ltd, Bangalore.
20. Co-ordinated National e-conference at DSATM On 10-7-2021 at department level.
21. Co-ordinated Intercollegiate Project Competition (IPC) at DSATM on 17-07-2021.

Roles Played at DSATM, Bangalore

- Served as Associate Professor for 4+ years and taught theory and Laboratory subjects.
- IPR Coordinator for 4 years.
- Project Coordinator for 4 years, making students to participate in Intercollegiate Project Competitions, various Student's project funds ie KSCST, various Awards like **Vishwakarma Award**, Involve them in contributing to Conferences & Journals.
 - **KSCST students Grant 2019-2020 (2 Granted)**
 - **KSCST students Grant 2020-2021 (2 Granted & Best Project of the Year 2021 Award)**
 - **KSCST students Grant 2021-2022 (2 Granted)**
 - **KSCST students Grant 2022-2023(2 Granted)**
 - **KSCST students grant 2023-2024 (6 Granted)**
 - **KSCST students Grant 2025-2026**
 - **VTU students Grant-2020-21(two projects Granted)**
 - **VTU students Grant-2021-22(two projects Granted)**
 -
- Seminar Coordinator for one year.
- NBA criteria Coordinator
- NAAC criteria Coordinator.

Patent Details

1. Title: SSD based Automated Crowd social distance monitoring and counting with RF controlled UGV filed with Application Number- 202141007502, Reference Number/ Allication type- E-101/1555/2021-CHE
2. Augmented Reality (AR) Near Maintaining Vegetable and Fruits Conditions in storage of Super Markets, Filed 17th March, 2022, Application Number- 202241014779.Publication Date : 08/04/2022, **Granted-30-5-2024.**
3. Cognitively optimized Assistance or Guidance for visually impaired, Filed 1st November, 2023, Application Number-202341074397.Publication Date : 10/11/2023, **Published**
4. Rare earth free High temperature Magneto Strictive Actuators/ sensor for Structural Health Monitoring, 202441093484, Date-29-11-2024; STATUS-**Published**
5. Wearable Sleeve for Physiotherapy Assessment with Range of Motion Monitoring Using ESP32 and IMU Sensor, 202441094102; Date-30-11-2024; STATUS-

Published.

6. Smart Energy Meter with Real-Time Monitoring and Integrated Payment System, 202541054172, filed on 4/6/2025, **published** on 13/6/2025.
7. Solar based Power Banks supporting Affordable and Clean Energy, 202541080093, filed on 23/8/2025 , status – **published** on 11-9-2025.
8. EcoEdge: A Smart Carbon Footprint Tracking app, 202644048938, filed on 17/04/2026, status – **published** on 1-5-2026.
9. Smart Safety cum Fitness Band for Women, 202644054444, filed on 29/04/2026, status – **published** on 15-5-2026.
- 10.

Professional Membership

1. Life member of ISRS (L-5789)
2. Life member of IUPRAI (L-252)

Funded Projects

1. VGST sponsored 2 years project on “**Advanced Image Processing Laboratory to develop signal / Image processing algorithms, SAR Image Change Detection algorithms to monitor critical changes**” under **KFIST L1** for 20Lakhs. Status- **Completed.**(August 2023)

Students Funded Projects

1. Soil analysis for fertilizer and crop prediction using optical sensors and machine learning for agriculture, funded by KSCST students Grant Karnataka, India with the reference number 45S BE-0269 during 2021-2022.
2. IMU Sensor based Wearable Sleeve for Physiotherapy Assessment using ESP32 and MEMS Technology , VTU Sponsored Student Project.
3. HYBRID - GWO ALGORITHM BASED PID CONTROLLER FOR QUADCOPTERS, funded by KSCST students Grant Karnataka, India with the reference number 47S_BE_5021 during 2023-2024.
4. Secure Drive: Intelligent Vehicle Protection and Safety System, funded by KSCST students Grant Karnataka, India with the reference number 49S_BE_6113 during 2025-2026.

Guideship

Ph.D Scholar: Ms. Sindhu K, Development of SAR Image change Detection Algorithms using Deep Learning allotted on 20th August, 2024 under VTU, Status- **Course work Completed.**

Contact Details

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My Vision

More than transmitting knowledge, teaching is about inspiring others to discover their purpose and potential. As an Associate professor, I have the opportunity to impact the lives of students, and I take that role seriously. Through teaching I dedicate myself to inspiring, challenging, and cultivating the minds of my students. Always establishing and maintaining professional ethics.

Galileo Galilei is quoted as saying, "You cannot teach a man anything; you can only help him find it within himself."