



# C. ABDUL HAKEEM COLLEGE OF ENGINEERING AND TECHNOLOGY

Hakeem Nagar, Melvisharam-632 509

## FACULTY PROFILE

Name	MRS.T.S. SINDHU						
Gender	FEMALE						
Present Designation	Assistant Professor			Regular / Adjunction		Regular	
Date of Joining	03.07.2017						
Mobile No.				Email	tssindhu13@gmail.com		
Highest Educational Qualification	M.E			Specialization		Applied Electronics	
Additional Qualification	GATE/NET/SLET	-					
Total working Experience		(i) Teaching : 8 yrs 8 months (ii) Industry : -					
Publications	Journals	3	International Journals		3	National Journals	
	Conferences	7	International Conferences		7	National Conferences	
No. of Patent	--						
No of Workshops/Seminars/Conferences/ FDP/MOOC attended	FDP: 35 Conferences: 14 MOOC: 15						
No of Workshops/Seminars/Conferences/ FDP organized	Seminars: 14 Workshops: 2 Conferences: 1						
No of UG / PG / Ph.D Guidance:	UG: 8 PG: 2 PhD:						
Membership in Professional Bodies	IAENG						
Awards / Recognition Received	5-Cash Awards for Giving Better Results						
Other Responsibilities, if any	Department Placement Coordinator CAHCET Institution’s Innovation Council (IIC) Member						

## JOURNAL DETAILS

### Journal Publications

- T S Sindhu**, N Kumarathan, P Anandan , P Durga, Performance Evaluation of Various Optimizers on Alzheimer's Disease Classification Using Deep Neural Network, International Journal of Systematic Innovation 8 (4), 18-26,2024.
- T S Sindhu**, N Kumarathan, P Anandan, Hybrid optimized deep fuzzy clustering-based segmentation and Deep Maxout Network for Alzheimer's disease classification, Biomedical Signal Processing and Control, Volume 93, 106118,1-17,2024.
- J Thirumalai, M Gomathi, **T S Sindhu**, A Senthil Kumar, R Puviarasi, A hybrid optimisation enabled deep learning for object detection and multi-object tracking, International Journal of Ad Hoc and Ubiquitous Computing,2935, 020007,150-165

(2024).

### Conference Publications

1. **T S Sindhu**, G Chandrika, G Divya, R Sumathi, P Durga ,Rice leaf disease detection using machine learning technique, AIP Conference Proceedings, 2935, 020007 (1-6).2024.
2. **T S Sindhu**, Mohamed Yousuff Caffiyar, S. Santhosh, A. Srinivasan, K. Velu, M. Naveen Kumar, M. Avinesh, From Sensors to Smartphones: Evaluating the Blynk Iot Smart Plant Monitoring System for Modern Gardening, Volume 14, Issue 2, 2024.
3. **T S Sindhu**, N Kumaratharan, P Anandan, P Durga, Performance Evaluation of CNN Models for Alzheimer's Disease Detection with MRI Scans, Vol ;5, Issue-4,2023
4. **T S Sindhu**, N Kumaratharan, P Anandan, A Review on Optimization Algorithms for Feature Selection, IEEE, 851-855,2023
5. **T S Sindhu**, N Kumaratharan, P Anandan, Review on automatic detection of Alzheimer disease, IEEE,1-6,2022.
6. **T S Sindhu**, N Kumaratharan, P Anandan, A review of magnetic resonance imaging and its clinical applications,IEEE, 38-42,2022.
7. **Sindhu.T.S**, Vijayarangan.S, Sarthkumar.N, Naveenprasanth.M, IOT Device for Sewage Gas Monitoring and Alert System, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Volume 10, Issue 7, July 2021.

### CONFERENCE DETAILS

#### INTERNATIONAL

1. **Sindhu T S**, presented a paper titled on Fuzzy Clustering Approach on the Detection of Hard Exudates in Fundus Images in International Conference on Electrical, Electronics and Computer Engineering- ICEECE '16 Organized by Vivekanandha College of Engineering for Women, March 22 & 23 2016.
2. **Sindhu T S**, presented a paper titled on Automated Segmentation of Retinal Layers in Optical Coherenceusing SWT with Legendre Level Sets in International Conference on Electrical, Electronics and Computer Engineering - ICEECE '17 Organized by Vivekanandha College of Engineering for Women, March 8 to 9 2017.
3. **Sindhu T S**, presented a paper titled on Survey on Image Compression Techniques In International Conference on Advanced Scientific Innovation in Science, Engineering and Technology (ICASISSET-2019) Organized by Bharat Institute of Higher Education and Research 19<sup>th</sup> April 2019 to 23<sup>rd</sup> April 2019.
4. **Sindhu T S**, presented a paper titled on A Survey on Magnetic Resonance Imaging In International VirtualConference on Smart Advanced Material Science and Engineering Applications (IVCSAMSEA- 2020) Organized by K L University, Guntur, India,03<sup>rd</sup> Dec 2020 to 5<sup>th</sup> Dec 2020.
5. **Sindhu T S**, presented a paper titled on Ocular Disease Diagnosis in Fundus Images Using A Deep Learning in International Conference on Contemporary Engineering and Technology (ICCET-2021) Organized by Prince Shri Venkateshwara Padmavathy Engineering College & OSIET Chennai, March 20 to 21<sup>st</sup> 2021.
6. **Sindhu T S**, presented a paper titled on Review on Automatic Detection of Alzheimer Disease in International Conference on Computer Communication and Informatics (ICCCI) Organized by Sri Shakthi Institute of Engineering and Technology, Jan 25- 27,2022.
7. **Sindhu T S**, presented a paper titled on A Review of Magnetic Resonance Imaging and its ClinicalApplications in 6th International Conference on Devices, Circuits and Systems (ICDCS) Organized by Karunya Institute of Technology and Sciences, Coimbatore, India,21-22 April 2022.
8. **Sindhu T S**, presented a paper titled on Rice Leaf Disease Detection Using Machine Learning Technique in International Conference on Artificial Intelligent Systems for Sustainable Solutions (AIS3) Organized by C.Abdul Hakeem College of Engineering and Technolgy,Ranipet,20 Jan 2023.
9. **Sindhu T S**, presented a paper titled on A Review on Optimization Algorithms for Feature Selection in International Conference on Sustainable Computing and Smart Systems (ICSCSS-2023) Organized by Hindusthan College of Engineering and Technology Coimbatore, India, 14 to 15 June 2023.
10. **Sindhu T S**, presented a paper titled on Automated Classification Of Alzheimer's Disease Based On MRI Image Processing Using Transfer Learning Network Architectures in AICTE Sponsored International Conference on Information and Communication Engineering (ICICE '23) Organized by CARE College of Engineering, Trichy,

Tamilnadu ,27.09.2023 & 28.09.2023.

11. **Sindhu T S**, presented a paper titled on Blynk IOT Smart Plant Monitoring System in International Conference on Electronics, Communication, and Advanced Processing Systems (ICECAPS 24) Organized by C.Abdul Hakeem College of Engineering and Technology,Ranipet,25<sup>th</sup> Apr 2024.
12. **Sindhu T S**, attended a 9th International Conference on Human Values in Higher Education (ICHVHE 2024) organized by SRM Institute of Science and Technology & Ajay Kumar Garg Engineering College, AICTE Sponsored, UHV Foundation,22<sup>nd</sup> to 24<sup>th</sup> November, 2024.

## NATIONAL

13. **Sindhu T S**, presented a paper titled on Groggy Detection using Python In National E-Conference on Recent Trends on Computational Intelligence (NCRTCI'2021) Organized by Bharath Institute of Science and Technology, Chennai, Tamilnadu, 9<sup>th</sup> April 2021.
14. **Sindhu T S**, presented a paper titled on IOT Device for Sewage Monitoring and Alert System in National Conference on Advancement in Emerging Technologies (NCAET-2021) Organized by Meenakshi Sundararajan Engineering College, Kodambakkam, Chennai,10<sup>th</sup> April 2021.

## FDP DETAILS

1. **T S Sindhu** has Participated in a 1day FDP on Building Online Feedback Application Using Google Apps organised by Department of CSE, C Abdul Hakeem College of Engineering and Technology, Melvisharam held on 31<sup>st</sup> January 2018
2. **T S Sindhu** has Participated in a 1 day FDP on Active Learning organised by Department of CSE, C Abdul Hakeem College of Engineering and Technology, Melvisharam held on 21<sup>st</sup> April 2018
3. **T S Sindhu** has Participated in the 12 weeks FDP on Internet of Things organised by NPTEL held from (JAN-APRIL 2018)
4. **T S Sindhu** has Participated in the 8 weeks FDP on Remote Sensing and Digital image processing of Satellite Data organised by NPTEL held from (AUG-SEP 2018)
5. **T S Sindhu** has Participated in the 8 weeks FDP on Introduction to Industry 4.0 and Industrial Internet of Things organised by NPTEL held from (JAN-APRIL 2019)
6. **T S Sindhu** has Participated in the 5 days FDP on Data Analysis using R and MATLAB Tools organised by Department of IT, C Abdul Hakeem College of Engineering and Technology, Melvisharam held from 30<sup>th</sup> April 2019 to 04<sup>th</sup> May 2019
7. **T S Sindhu** has Participated in the 15 days FDP on “Managing Online classes and Co-Creating MOOCS organised by Ramanujam College, University of Delhi held from 20.04.2020 to 6.5.2020
8. **T S Sindhu** has Participated in the 2 days FDP on Cyber Security & Embedded System organised by Jeppiaar Institute of Technology, held from 26.05.2020 to 27.05.2020
9. **T S Sindhu** has Participated in the 5 days FDP on Arduino organised by Kings Engineering College, Chennai held from 01.06.2020 to 05.06.2020
10. **T S Sindhu** has Participated in the 3 days FDP on Future Advancements and Applications of IOT organised by Sandip Institute of Engineering & Technology, Nashik held from 12.06.2020 to 14.06.2020
11. **T S Sindhu** has Participated in the 5 days FDP on Embedded and Real Time Systems organised by Saveetha Engineering College, Chennai held from 15.06.2020 to 19.06.2020.
12. **T S Sindhu** has completed a one-month orientation program on Induction/Orientation Programme- Faculty in Universities/Colleges/ Institutes of Higher Education organised by Teaching Learning Centre, Ramanujam College, University of Delhi held from June 04-July 01,2020
13. **T S Sindhu** has Participated in the 6 days FDP on Moodle Learning Management System organised by Government Arts and Science College, Villupuraam held from 2<sup>nd</sup> July to 8<sup>th</sup> July 2020
14. **T S Sindhu** has Participated in the 5 days FDP on STTP-Teaching Learning Pedagogies organised by A.G.Patil Polytechnic Institute, Solapur held from 3<sup>rd</sup> August to 8<sup>th</sup> August 2020
15. **T S Sindhu** has Participated in the 7 days FDP on Induction/Refresher Programme- Machine Learning & IOT Applications

- organised by Sri Indu College of Engineering and Technology held from 9<sup>th</sup> November to 16<sup>th</sup> November 2020
16. **T S Sindhu** has Participated in the 5 days FDP on Medical Image Processing and Deep Learning Technologies organised by Panimalar Institute of Technology held from 21<sup>st</sup> November to 25<sup>th</sup> November 2020
  17. **T S Sindhu** has Participated in the 2 weeks FDP on Machine Learning and Deep Learning - An Application Perspective organised by Sreenivasa Institute of Technology and Management Studies held from 22nd March – 03rd April 2021
  18. **T S Sindhu** has Participated in the 5 days FDP on BioMEMS and Lab on Chip Technologies for Point of Care Applications organised by C Abdul Hakeem College of Engineering and Technology held from 5.7.2021 to 9.7.2021
  19. **T S Sindhu** has Participated in the 4 days FDP on Recent Trends in Organic Devices organised by Presidency University, Karnataka held from 19<sup>th</sup> to 22<sup>nd</sup> July 2023
  20. **T S Sindhu** has Participated in the 5 days FDP on Emerging Technologies organised by Dr. M.G.R. Educational and Research Institute university, Poonamallee High Rd, Vishwas Nagar, Maduravoyal, Chennai, Tamil Nadu 60009 held from 7th August 2023 to 11th August 2023
  21. **T S Sindhu** has Participated in one weeks FDP on Learning for NLP and Computer Vision organised by NIST Institute of Science and Technology (Autonomous), Berhampur in Collaboration with ExcelR Edtech Pvt. Ltd. held from 25th Oct to 31st Oct 2023.
  22. **T S Sindhu** has Participated in the 5 days FDP on Online Faculty Development Program on Modern Medical Instrumentation organised by SRM Institute of Science and Technology, SRM Nagar, Kattankulathur - 603 203, Chengalpattu District, Tamil Nadu held from 4th to 8th December 2023.
  23. **T S Sindhu** has Participated in the 5 days FDP on Emerging Trends in Artificial Intelligence and Deep Learning organised by Sri Sai Ram Institute of Technology Sai Leo Nagar, West Tambaram, Chennai – 600 044 held from 26<sup>th</sup> Dec 2023 to 30<sup>th</sup> Dec 2023
  24. **T S Sindhu** has Participated in the 5 days FDP on Next generation Artificial Intelligence organised by Vishwakarma Institute Information and Technology, Pune held from 11<sup>th</sup> march to 16<sup>th</sup> march 2024
  25. **T S Sindhu** has Participated in the 1 day FDP on IP Awareness/Training program organised by Intellectual Property Office, India held on March 20,2024
  26. **T S Sindhu** has Participated in the 5 days FDP on Cognitive Computing for Smart Applications organised by Dept. of AI&DS, VIIT, Pune held from 18th to 22th March 2024.
  27. **T S Sindhu** has completed 8 weeks FDP on AI: Constraint Satisfaction organised by Swayam NPTEL held from (JAN-MAR 2024)
  28. **T S Sindhu** has Participated in in one week FDP on Synergizing VLSI Design with Artificial Intelligence and Machine Learning Techniques organised by SRM Institute of Science and Technology, Ramapuram held from 27.5.2024 to 3.6.2024
  29. **T S Sindhu** has Participated in in one week FDP on 7 Days Online Faculty Development Program on Essential Skills For Professional Development in Higher Education” organised by International Foundation for Research And Education, Tiruchengode-637211, Namakkal-Dt, Tamil Nadu, India held from 01.07.2024 to 07.07.2024
  30. **T S Sindhu** has Participated in the 5 days FDP on Exploring New Frontiers in Teaching Tools, AI and Data Analytics organised by Measi Institute Of Information Technology, Royapettah, Chennai held from 29-07-2024 to 02-08-2024.
  31. **T S Sindhu** has Participated in one week FDP on Latest Developments in RF Technologies in 5G and Beyond organised by Department Of Electronics and Communication Engineering, Rajalakshmi Engineering College In Association With IIC/REC And IEEE Communication Society/REC held from 31/07/2024 to 06/08/2024
  32. **T S Sindhu** has Participated in the 6 days FDP on Industrial Applications of Embedded Systems and IOT organised by Rajalakshmi Engineering College in association with IIC/REC and IEEE Communication society/REC held from 22.8.24 to 28.8.24
  33. **T S Sindhu** has Participated in the 6 days FDP on Emerging Trends in Wearable Devices and The Future of Healthcare organised by ATAL AICTE FDP- Department of Biomedical Engineering, SNS College of Technology, Coimbatore held from 09/12/2024 to 14/12/2024
  34. **T S Sindhu** has Participated in the 6 days FDP on Leveraging Healthcare: Innovations, Technology, and Applications (HealthITA) organised by ATAL AICTE FDP- Department of Computer Science and Engineering, National Institute of Technology Delhi, India held from 16<sup>th</sup> Dec 2024 to 21<sup>st</sup> Dec 2024

35. **T S Sindhu** has completed 12 weeks FDP on Machine Learning and Deep Learning – Fundamentals and Applications organised by Swayam NPTEL held from (JULY-OCTOBER 2024)

#### MOOC DETAILS

1. **T S Sindhu** has successfully completed a course on Internet of Things organized by NPTEL in the duration of 12weeks from (JAN-APRIL 2018).
2. **T S Sindhu** has successfully completed a course on Remote Sensing and Digital imageProcessing of Satellite Data organized by NPTEL in the duration of 8weeks from (AUG-SEP 2018).
3. **T S Sindhu** has successfully completed a course on Introduction to Industry 4.0 and Industrial Internet of Things organized by NPTEL in the duration of 8weeks from (JAN-APRIL 2019).
4. **T S Sindhu** has successfully completed a course on Module 1\_ Orientation Towards Technical Education and Curriculum Aspects organized by AICTE-NITTT in the duration of 8weeks from 31 Mar 2021 to 31 May 2021.
5. **T S Sindhu** has successfully completed a course on Module 2\_ Professional Ethics & Sustainability organized by AICTE-NITTT in the duration of 8weeks from 31 Mar 2021to 31 May 2021.
6. **T S Sindhu** has successfully completed a course on Module 3\_ Communication Skills, Modes & Knowledge Dissemination organized by AICTE-NITTT in the duration of 8weeks from 31 Aug 2021 to 31 Oct 2021.
7. **T S Sindhu** has successfully completed a course on Module 4\_ Instructional Planning and Delivery organized by AICTE-NITTT in the duration of 8weeks from 31 Aug 2021 to 31 Oct 2021.
8. **T S Sindhu** has successfully completed a course on Module 5\_ Technology Enabled Learning & Life Long Self Learning organized by AICTE-NITTT in the duration of 8weeks from 31 Mar 2022 to 31 May 2022.
9. **T S Sindhu** has successfully completed a course on Module 6\_ Student Assessment and Evaluation organized by AICTE-NITTT in the duration of 8weeks from 31 Mar 2022 to 31 May 2022.
10. **T S Sindhu** has successfully completed a course on Machine Learning with Applications to Object Recognition organized by Infosys Springboard in the duration of 8weeks from 01 Nov 2022 to 18 Nov 2022.
11. **T S Sindhu** has successfully completed a course on Module 7\_ Creative Problem Solving, Innovation and Meaningful R & D organized by AICTE-NITTT in the duration of 8weeks from 30 Sep 2022 to 30 Nov 2022.
12. **T S Sindhu** has successfully completed a course on Module 8\_ Institutional Management & Administrative Procedures organized by AICTE-NITTT in the duration of 8weeks from 30 Sep 2022 to 30 Nov 2022.
13. **T S Sindhu** has successfully completed a course on Mentor Based training of NITTT organized by AICTE-NITTT in the duration of from Dec 2023.
14. **T S Sindhu** has successfully completed a course on AI: Constraint Satisfaction organized by NPTEL SWAYAM in the duration of 8 Weeks from (JAN-MARCH) 2024.
15. **T S Sindhu** has successfully completed a course on Machine Learning and Deep Learning – Fundamentals and Applications organized by NPTEL SWAYAM in the duration of 12 Weeks from (JULY-OCTOBER 2024).

#### EVENTS ORGANISED

1. **Ms.T.S.Sindhu** & Mrs.D.Santhiya has conducted a National level E-Quiz on Internet of Things on 25.6.2020 to 27.6.2020.
2. Dr.P.Anandan & **Ms.T.S.Sindhu** has organized a Webinar on Computer Vision and its Applications-An Introduction on 12.07.2020.
3. Dr.P.Anandan, **Ms.T.S.Sindhu** & Mrs.B.Suganya has organized a Webinar on Quantification of Hippocampal Dentation on 13.7.2020.
4. Dr.P.Anandan & **Ms.T.S.Sindhu** has conducted a National level E-Quiz on Basic Electronics on 5.7.2020 to 19.7.2020
5. Dr.C.Mohamed Yousuff & **Ms.T.S.Sindhu** has organized a Orientation session for all students & faculties of Institute by Innovation Ambassador(s)” on 4.3.2021.

6. Mr. P.Mohammed Sajid & **Ms. T.S.Sindhu** has organized a Webinar on Multirate Signal Processing For Communication Systems on 31.08.2021.
7. Dr.C.Mohamed Yousuff & **Ms.T.S.Sindhu** has organized a MOE's sponsored Impact Lecture Series on "Incubation Center-A Boom to Startup" on 04.10.2021.
8. Dr.C.Mohamed Yousuff & **Ms.T.S.Sindhu** has organized a MOE's sponsored Impact Lecture Series on "Entrepreneurs–Challenges & Opportunities" on 04.10.2021.
9. Dr.C.Mohamed Yousuff & **Ms.T.S.Sindhu** has organized a MOE's sponsored Impact Lecture Series on "Introduction to Intellectual Property Rights" on 18.10.2021.
10. Dr.C.Mohamed Yousuff & **Ms.T.S.Sindhu** has organized a MOE's sponsored Impact Lecture Series on "Intellectual Property in Academia" on 18.10.2021.
11. Dr.C.Mohamed Yousuff & **Ms.T.S.Sindhu** has organized a Modern educational system fuelling startups and entrepreneurship in india on 11.11.2021.
12. **Ms.T.S.Sindhu** & Mr.S.Nafees Ahmed has organized a Technovial 2K21 on 18.12.2021.
13. **Ms.T.S. Sindhu** has organized a "Session on Accelerators/Incubation - Opportunities for Students & Faculties – Early Stage Entrepreneur" on 20.8.2022.
14. **Ms.T.S.Sindhu** & Mrs.R.Sumathi has organized a one day Workshop Cum Hands on training on "Arduino in Proteus" on 30.9.2022.
15. **Ms.T.S.Sindhu** has organized a webinar on Process of Innovation Development & Technology Readiness Level (TRL)" & "Commercialization of Lab Technologies & Tech-Transfer" on 28.2.2023.
16. **Ms.T.S.Sindhu** has organized a Workshop on Intellectual Property Rights (IPRs) and IP Management for Start up on 8.5.2023.
17. **Ms.T.S. Sindhu** has organized a Session on Innovation/Prototype Validation-Converting Innovation into a Start-up on 19.8.2023.
18. **Ms.T.S. Sindhu** has organized a Internal Hackathon -Smart India Hackathon 2023 on 20.9.2023.
19. **Ms.T.S. Sindhu** & Mr C Abdul Rahman has organized an International Conference on Electronics, Communications and Advanced Processing Systems (ICECAPS 2024) on 25.4.2024.