



FACULTY PROFILE ON WEBSITE

Faculty Name	Dr Tripti R Kulkarni	
Academic Designation	Assistant Professor	
Educational Qualification	BE,M.Tech,Ph.D	
Experience in Teaching & Industry	21 Years & 01Years	
Date of Joining	24/07/2014	
Official Email ID	kulkarnitripti@dsatm.edu.in	
Employee ID	180232	

Educational Details

Ph. D | 2022 | Electronics and communication Engineering, VTU,
MTech | 2006| VLSI Design and Embedded Systems, VTU, Belagavi ,
BE | 2004| KLE (VTU), Belagavi

Professional Experience

1. Work Experience of 21 years.
2. Currently working as Assistant Professor in the Department of Electronics and Communication Engineering, Dayananda Sagar Academy of Technology and Management, Bengaluru from July 24th, 2014.
3. Worked as Assistant Professor in the Department of Electronics and Communication Engineering, PESIT, Bangalore from September 4th 2006 to May 30th 2014.
4. Worked in Forbes Ltd as a Project Trainee for 1 year from May 1st 2005 to June 30th 2006.

Publications

1. Kulkarni, T.R. *et al.* (2026). Modeling Subthreshold Leakage in MOSFETs: Supervised Regression with Noise-Aware Synthetic Datasets. In: Senjyu, T., Mahmud, M., Joshi, A. (eds) Smart Trends in Computing and Communications. SmartCom 2026. Lecture Notes in Networks and Systems, vol 1990. Springer, Cham. https://doi.org/10.1007/978-3-032-26908-9_42

2. Kulkarni, T.R., Vasudeva, G., Renukaprasad, G., Roopa, K.R., Srividya, B.V., Jatkar, M. (2026). Speech Detection of Pathological Voice Disorders Non-Invasively Using Machine Learning Algorithms. In: Joshi, A., Ragel, R.G., S., K. (eds) ICT: Applications and Social Interfaces. ICTCS 2025. Lecture Notes in Networks and Systems, vol 1874. Springer, Cham. https://doi.org/10.1007/978-3-032-19681-1_2
3. Vasudeva G. et.al (2023). Design of FinFET Based Op-Amp Using High-K Device 22 nm Technology. Applied Mathematics, Modeling and Computer Simulation , [10.3233/ATDE231033](https://doi.org/10.3233/ATDE231033)
4. Vasudeva, G. et al. (2025). Design of OPAMP Based on 22 nm FinFET Technology. In: Kaiser, M.S., Singh, R., Bandyopadhyay, A., Mahmud, M., Ray, K. (eds) Proceedings of the Fifth International Conference on Trends in Computational and Cognitive Engineering. TCCE 2023. Lecture Notes in Networks and Systems, vol 1208. Springer, Singapore. https://doi.org/10.1007/978-981-96-0185-1_32
5. Jatkar, M., G, V., Kulkarni, T.R. et al. LC oscillator frequency prediction using machine learning linear regression algorithm. *Discov Electron* 2, 52 (2025). <https://doi.org/10.1007/s44291-025-00092-9>
6. Tripti R Kulkarni, Vinayak Bhat, "Real Time Prosthetic Hand ", *Journal of Embedded Systems and Processing*, Volume-7, Issue-3(September-December,2022), <https://doi.org/10.46610/JOESP.2022.v07i03.001>
7. Tripti R Kulkarni, N.D. Dushyanth, "Early and noninvasive screening of common cardiovascular related diseases such as diabetes and cerebral infarction using photoplethysmograph signals", *Results in Optics*, Volume 3, 2021,100062, ISSN 2666-9501, <https://doi.org/10.1016/j.rio.2021.100062>
8. Tripti R kulkarni , N.D Dushyanth, "Performance Evaluation of Deep Learning Models in Detection of Different Types of Arrhythmia Using Photo plethysmography Signals", *International Journal of Information Technology(BJIT) An Official Journal of Bharati Vidyapeeth's Institute of Computer Applications*. ISSN 0973-5658, Int. j. inf. tecnol. September 25th (2021). <https://doi.org/10.1007/s41870-021-00795-8> (**SPRINGER-SCOPUS-UGC APPROVED**)
9. Tripti R Kulkarni, Dushyanth N D," Noninvasive method for Heart Disease prediction using Machine Learning algorithms for photoplethysmograph signals". *Clinical & Experimental Cardiology*, Publications, Vol.12 Iss 10 No:1000704, (2021).
10. Tripti R kulkarni , N.D Dushyanth, "Empirical Mode Decomposition Based Signal Denoising And Heart Rate Estimation From PPG Signal", *International Journal Of Current Engineering And Scientific Research (IJCESR)*, SN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-8, ISSUE-5, 2021, DOI:10.21276/ijcesr
11. Tripti kulkarni, B Niranjana Krupa, "Noninvasive Method to find Oxygen Saturation of the fetus using photoplethysmogram", *International conference ICEECOT-2016,Mysore* 9-10 Dec. 2016, [DOI: 10.1109/ICEECOT.2016.7955182](https://doi.org/10.1109/ICEECOT.2016.7955182), Publisher: IEEE (**SCOPUS INDEXED**)

International Conferences:

1. N. M. Lutimath, S. A, T. Kulkarni, V. T R, U. C R and J. M V, "Transfer Learning Driven Flower Classification With Optimized MobileNetV2 Architecture," *2025 International Conference On Emerging Computation and Information Technologies (ICECIT)*, Tumkur, India, 2025, pp. 1-6, doi: 10.1109/ICECIT67774.2025.11451028.

2. Tripti R, Kulkarni and Arun Vikas, Singh and Vasudeva, G and Bharathi, Gururaj (2025) *Sanitization and Sterilization Robot Ultra Violet Based*. International Journal of Trend in Scientific Research and Development, 9 (2). pp. 1004-1010. ISSN 2456-64
5. Tripti Kulkarni and savitha Kempannavar: “Expandable Cache Design for embedded Systems” International Conference on VLSI, Communication, Advanced devices, Signals & Systems and Networking, VCASAN 2013 – July 17-19’ in BNMIT, Engineering College, Bangalore,
6. Tripti Kulkarni and Srivathsava N L : “Low Power clock-synchronizer for SOC with delay line controller (DLC) in 45nm CMOS Technology “, work on PLL under 45nm technology has been archived in IEEE Xplore, International Conference on Advanced Communication, Control and Computing Technologies (ICACCCT) 2012 proceedings, ISBN: 978-1-4673-2047-4. can also be viewed on the following link on Sr. No.55. <http://www.syedengg.ac.in/pdf/icacct12>.
7. Tripti kulkarni, chaitra Arun, pooja MP: “Simulation of a vending machine using VHDL” International conference on Electronics and communication Engineering (ICECE) held on April 16th, 2012 ,Pune. Organised by IRNet
8. Tripti Kulkarni, Dinesh kumar, Pooja. M. P: “Simulation of a thermal printer (using USB to serial converter)” International conference on Electronics and communication Engineering (ICECE) held on April 16th, 2012 ,Pune. Organised by IRNet Bhubaneshwar.
9. Tripti Kulkarni and Srivathsava N L ,” Low Power Differential Output Phase Locked Loop in 45nm CMOS Technology “, work on PLL under 45nm technology has been archived in IEEE Xplore, under 4th International Conference on Electronics Computer Technology, “ICECT 2012” held during April 6-8 2012, in Kanyakumari, India. proceedings, ISBN: 978-1-4673-1849-5.
10. Tripti Kulkarni and Narala Swathi,” CMOS Full Adder For Energy-Efficient Arithmetic Applications”, ICVSP-2012 International Conference on VLSI and Signal Processing May 4-5, 2012 , K.S. Institute of Technology
11. Tripti Kulkarni and Srivathsava N L ,” Novel design of VCO with output peak to peak control”, IRNet Second International Conference on Control, Communication and computer Technology (CCCT 2011), Bangalore, Nov 2011
12. Tripti Kulkarni and Mokshit B R, “ NANOROBOTICS THE FUTURE OF MEDICINE”, International conference on wearable Technologies (ICOWT-17) held at Dayananda Sagar University, School of Engineering, Bengaluru on 22nd -23rd June 2017.

National Conferences:

1. Tripti Kulkarni & Sai Shruthi. V.P, “Intelligent system for process control and supervision”, National conference on Advances in Electronics and Intelligent computing, East West Institute of Technology, May 2011.
2. Tripti Kulkarni, Tejas.S, Prajwal R “A Novel approach for Traffic Avoidance using preemptive concept”, First National Conference on computational Control Systems and Optimization(CCSO 2011), Dr. Ambedkar Institute of Technology , May 2011.
3. Pallavi Kulkarni & Tripti Kulkarni “Analysis of Security Threats and Countermeasures in Cloud Computing” in the “ National Conference on Convergence of Science , Technology and Management NCCSTM-2017” held on 19 th May 2017 at Dayananda Sagar Academy of Technology and Management, Bangalore.
4. Tripti Kulkarni & Pallavi Kulkarni, “Digital Processing of SPO2 from PPG Signal” in the “ National Conference on Convergence of Science , Technology and Management NCCSTM-2017” held on 19 th May 2017 at Dayananda Sagar Academy of Technology and Management, Bangalore

Awards

1. Programming for Everybody (Getting started with Python) an online non-credit course authorized by University of Michigan and offered through Coursera
2. Received Appreciation letter from Institute of DSATM for **100%** student results in the year 2020 (ODD Semester).
3. 100% results in the year 2021(Even Semester)

Academic Activity

1. Project Co-ordinator for 2 years 2014 and 2015
Designed the full process of Project, Evaluation, Phases as it was first time in the department .
2. Seminar Co-ordinator for the year 2019-2020
3. Mini Project Co-ordinator for the year 2019-2020
4. Website co-ordinator from the year 2021
5. Departmental Proctor Coordinator
6. Sports committee member Organized sports for women’s on the occasion of women’s day
7. Women Empowerment Cell member
 - Organized webinar on “**Mental Wellness & Emotional Empowerment**” on July 30th 2021.
 - Organized for Women’s Day celebration.
 - Organized various sports and fun activities for DSATM women’s in March 2021.
8. Event Co-ordinator (From August, 2017)
9. Final Year and M.Tech project guideship from 16 years.
10. Working for NBA criteria-2 and 7.
11. Working for NAAC criteria-1 and 4.
12. Experienced as a Test Coordinator

Faculty Development Activity/Workshops

1. One week capacity building workshop on Health Care Engineering organized by department of Medical Electronics Engineering collaboration with CDSIMER, Dayananda Sagar Institutions , 5th to 10th January 2026 , Bengaluru
2. Faculty Development program on Adaptability of RISC-V in Academia Research & Labs” held from July 28 to August 1, 2025, organized by the Department of Medical Electronics Engineering and Department of Electronics and Telecommunication Engineering, BMS College of Engineering, in collaboration with Angstromers Engineering Solutions Private Limited.
3. 2 days Faculty development program on social Emotional Learning at DSATM, Bengaluru
4. Five Days Virtual Faculty Development Program entitled “Skills and Opportunities in VLSI’ from 27th July to 31st July 2020 organized by Department of Electronics and Communication Engineering, Dayananda Sagar Academy of Technology and Management, Bengaluru in association with IETE, Bengaluru.

Contact Details

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