



FACULTY PROFILE ON WEBSITE

Faculty Name	Dr. T. VIGNESH	
Academic Designation	Assistant Professor	
Educational Qualification	PhD	
Experience in Teaching & Industry	9 & 2	
Date of Joining	02.05.2025	
Official Email ID	vignesh-ece@dsatm.edu.in	
Employee ID	180849	

Educational Details

Qualification	Institution / University	Year
Ph.D.	Anna University	2025
AICTE QIP PG (Blockchain and Data Science)	IIT Patna	2024
M.E. (Mechatronics)	Madras Institute of Technology, Anna University	2017
B.E. (Mechanical Engineering)	Jeppiaar Engineering College, Anna University	2015

Professional Experience

Institution / Organization	Designation	Period
Dayananda Sagar Academy of Technology & Management, Bengaluru	Assistant Professor	02.05.2025 – Till date
Sri Krishna College of Engineering and Technology, Coimbatore	Assistant Professor	01.06.2017 – 30.04.2025
CADD Centre, Chrompet, Chennai	CADD Engineer / Software Trainee	2014 – 2017

Publications

- **T Vignesh, D Selvakumar, PY Mallikarjun, NK Geetha, S Madhankumar, FTIR Spectroscopy and Machine Learning for Detection of Sudan I Dye as a Hazardous Contaminant in Turmeric Powder**, Journal of Environmental Chemical Engineering, 123709
- **S Madhankumar, GN Kannaiyan, T Vignesh, S Balamurugan, Drying kinetics modelling of bitter gourd in a phase change material-integrated indirect solar dryer**, Solar Energy 314, 114729
- **S Rajesh, S Madhankumar, PM Arunkumar, T Vignesh, Drying kinetics, energy, exergy, and economic aspects of indirect solar dryer with phase change material**, 2026, Solar Energy 305, 114287, IF 6.
- **T Vignesh, D Selvakumar, R Jayavel, Rapid Detection and Quantification of Adulterants in Turmeric Using Fourier Transform Infrared (FTIR) Spectroscopy Coupled with Advanced Statistical Models**, 2026, Food Analytical Methods 19 (1), 7, IF 3.
- **T Vignesh, D Selvakumar, R Jayavel, Multi-Spectral techniques for detecting adulterants in turmeric powder**, 2025, Microchemical Journal 209, 112830, IF 4.6.
- **T Vignesh, D Selvakumar, R Jayavel, Detecting ferric oxide adulteration in chilli Powder: A Multimodal analytical approach for enhanced food safety**, Microchemical Journal, 2025, 208, IF 4.6
- **T Vignesh, D Selvakumar, S Madhankumar, Drying kinetics, energy, colour and FTIR spectroscopy analysis on indirect solar dryer with paraffin wax and glass pieces as thermal storage material**, Solar Energy 282, 112925, 2024, IF 6.
- **Vignesh, T, Manikandan, N, Barath, B, Bharath, K.A, Bhargunandana, K. Braille Board Actuates Text into Braille code using Solenoid Actuator**, AIP Conference Proceedings., 2023.
- **Vignesh, T, Gowrishankar, S, Jishnu, M, Leander Joseph, P, Influence of telepresence robot using arduino UNO R3 based 20A robot control board**, AIP Conference Proceedings 2023.
- **Arvind, M, Keshav, B, Kishore, P, Dheeraj, A, Vignesh T, Design and Fabrication of Automatic Spiral Binding and Punching Machine**, Proceedings - 3rd International Conference on Smart Technologies, Communication and Robotics 2023, STCR 2023, 2023
- **Vignesh, T, Velusamy, K, Arul Murugan, S, Dheeraj, A, Selvan, T, Detection of Adulteration in Spices, Milk, Fruits, 2023 14th International Conference on Computing Communication and Networking Technologies**, ICCCNT 2023, 2023
- **Vignesh, T., Shibin Thomas, S., Vibunesh., Technology in Design Aspect of BIN Bot Robot'**, Proceedings - 1st International Conference on Smart Technologies Communication and Robotics, STCR 2021

- **Vignesh, T., Arul Praveen, T., ' Pipeline for Development of 3 Dimensional motion animation using the 2 Dimensional video', 2021 7th International Conference on Advanced Computing and Communication Systems, ICACCS 2021, 2021, pp. 991–995, 9442059**
- **Pooranam, N., Vignesh, T., ' A Swarm Robot for Harvesting a Paddy Field', Nature-Inspired Algorithms Applications, 2021, pp. 137–156**
- **Kumar, R.L., Pooranam, N., Vignesh, T., ' Smart equipment to protect patients and people from COVID disease', Biomedical Engineering Tools for Management for Patients with COVID-19, 2021, pp. 121–133**
- **Vignesh, T., Bhuvaneswari, M., Mohamed Ismail, A., ...Ashwin Raaj, R., Beni Rijo Singh, J, ' Development of Low Cost Pellet Loading and Unloading AGV', IOP Conference Series: Materials Science and Engineering, 2020, 995(1), 012009**
- **Vignesh, T., Bhuvaneswari, M., Manojkumar, S., Kishore, S., Bommuraj, N, 'Development of Automatic Tube Oil Skimmer', IOP Conference Series: Materials Science and Engineering, 2020, 906(1), 12028**
- **Manikandan, N., Vignesh, T., Prasath, C., Ismail, M., ' Thermo-Mechanical analysis of fused filament fabrication process', 2020, IOP Conference Series: Materials Science and Engineering, Vol 764, Sep 2020**
- **Madhankumar, S., Vignesh, T., Anand Raj, P., Praveen, T, 'Design and Modelling of L-type Bi-directional Roller Conveyers for Glass Hauling', 2020 Lecture Notes in Electrical Engineering, Mar 2020,**
- **Vignesh, T., Madhankumar, S., Anand Raj, P., Varadarajan, A., Arul Praveen, T., ' Gyro-stabilized Platform in Ambulance', Lecture Notes in Electrical Engineering, p 626, Mar 2020**
- **Vignesh, T., Selvakumar, D., Prasath, C., Manikandan, N., Sri Viswanath, R., 'Design and fabrication of home automation', 2019 IOP Conference Series: Materials Science and Engineering, V0623, June 2019.**
- **T. Vignesh, R. Nivetha, and D. Selvakumar, "Design and Fabrication of 6-axis Gesture Controlled Robot," 2019 5th International Conference on Advanced Computing & Communication Systems (ICACCS).**
- **T. Vignesh, Manikandan N, Kannaki. S, Prasath C, Bhuvaneswari M, Vignesh S, 'Development of Low-Cost Robotic Arm for Welding', International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8 and Issue-8, June, 2019, ISSN: 2278-3075.**
- **Bhuvaneswari, M., Emmanuel Gospel Raj, R., Vignesh, T., ' Automatic fish cutting and cleaning machine using digital image processing', International Journal of Recent Technology and Engineering, July 2019**
- **S. Kannaki, S. Jaganathan , S.Panneerselvam, C.Prasath, L.Feroz Ali, T.Vignesh, 'Design and Modeling of Automatic Packing System for Atta Kneader', International Journal of Innovative Technology and Exploring Engineering, Vol 8 and Issue 7 , May 2019, ISSN: 2278-3075**

- R. Vishnu Vardhan, N. Pooranam, S. Sivakumar, **T. Vignesh**, '**Producing Electrical Energy from Light Intensity and Design Tracking System By Dual Axis Method**', International Journal of Mechanical and Production Engineering Research and Development, Vol 9, Jan 2019.
- Madhankumar S, Rajesh S, Balalmurugan R, **Vignesh T**, '**Optimization of Process Parameters on Surface Roughness for Micro Electrochemical Machining of Aluminium Matrix Composite**' International Journal of Scientific Research Engineering and Technology, Vol 7, Feb 2018
- Rajesh S, Madhankumar S, Harikrishnan M, **Vignesh T**, '**Effect of Processing Parameters on Metal Matrix Composites in Stir Casting Process Using Taguchi Technique**' International Journal for Research in Applied Science & Engineering Technology, Vol 6, Jan 2018.
- Madhankumar S, Rajesh S, **Vignesh T**, Harikrishnan M, '**Fabrication of Al 6082, SiC and Boron Glass Powder Composites and Evaluation of Mechanical Properties**' International Journal of Innovative Research in Science Engineering and Technology, Vol 7, Jan 2018.
- **T.Vignesh**, P.Karthikeyan, S.Sridevi, '**Modeling and Trajectory Generation of Bionic Hand for Dexterous Task**', IEEE Xplore, Mar 2018
- Athira Soman, R. Kathiravan, **T. Vignesh**, Deepak Raj, '**Stress Analysis on Sae Supara Car Using FEA**, Journal of Basic and Applied Engineering Research, Vol 1, Oct 2014

International Conferences:

- Attended an International Conference on KeDAR2025, title "Edge AI-Based Real-Time Powertrain Fault Detection in Electric Vehicles Using Embedded Systems and Sensor Fusion" at NIT Kedar on Sep 05, 06 2025.
- Attended an International Conference on Advanced Material and technologies for industry 4.0 (ICAMT4.0) Title "Autonomous Mobile Robot for Library Management" at Bannari Amman Institute of Technology on 23.03.2023-24.03.2023
- Attended an International Conference on Advanced Material and technologies for industry 4.0 (ICAMT4.0) Title "Design and Fabrication of Automatic Spiral Binding and Punching Machine - KAKS" at Bannari Amman Institute of Technology on 23.03.2023-24.03.2023
- Attended the international conference on Braille Board Actuates text into braille code using solenoid Actuator – International conference on Innovations in Robotics, Intelligent Automation and Control (ICIRIAC 2022) at 14.10.2022 in SKCET

- Attended Virtual conference on Technology aspect in BIN BOT - First international conference on smart technologies, communication and robotics, Bannari Amman Institute of Technology
- Attended Virtual conference on INFLUENCE OF TELEPRESENCE ROBOT USING ARDUINO UNO R3 BASED 20A ROBOT CONTROL BOARD , MLR Institute of Technology, Hyderabad.
- Attended Virtual conference on Advances in electrical drives and process control and automation - 9.06.20, VIT Vellore.
- Published a paper Design and Fabrication of L-type Bi directional Roller Conveyors for Glass Hauling in International Conference ICIEEE - 2019 in Guru Nanak Institute of Technology, Nagpur
- Published a paper Design and Fabrication of Six axis gesture-controlled robot in international conference ICACCS 2019 in Eshwar College of Engineering
- Published a paper Robotic Arm for welding in international conference ICRAET 2019 in SKCET
- Published a paper Design and fabrication of home automation in international conference ICRAET 2019 in SKCET
- Published a paper Automated Metal Sorting System Based on Weight and Color of the Specimen in international conference ICRAET 2018 in SKCET.
- Published a paper Design and fabrication of Human Assisting Robot in international conference ICRAET 2017 in SKCET.
- Published a paper MODELING AND VECTOR ANALYSIS OF PROSTHETIC HAND USING HYBRID MECHANISM International conference ICARMS17 in SRM UNIVERSITY

National Conferences:

- Design and Fabrication of L-type Bi-directional Roller Conveyors for Glass Hauling, ICIEEE 2019.
- Design and Fabrication of Six-axis Gesture-controlled Robot, ICACCS 2019.
- Robotic Arm for Welding, ICRAET 2019.
- Design and fabrication of home automation, ICRAET 2019.
- Modeling and Vector Analysis of Prosthetic Hand Using Hybrid Mechanism, ICARMS17, SRM University.

Conference Attended

- International Conference on Knowledge Driven Approaches in VLSI and RF Design, NIT kedar 2025
- International Conference on Advanced Material and Technologies for Industry 4.0 (ICAMT 4.0), Bannari Amman Institute of Technology, 2023.
- International Conference on Innovations in Robotics, Intelligent Automation and Control (ICIRIAC 2022).
- First International Conference on Smart Technologies, Communication and Robotics.
- International Conference on Advanced Computing and Communication Systems (ICACCS 2019).
- International Conference on Robotics and Automation Engineering Technologies (ICRAET 2017, 2018, 2019).

Awards

- Best Inspiring Faculty award by SEVC 2025
- Best Model Award, TNSCST.
- Best Mentor Dronacharya award at Tamilnadan Kart Racing Championship
- Best faculty Dr Radhakrishnana Award
- Best Project Coordinator Award
- Young Faculty Award
- Mentor for Team Vulcan Solar Electric Vehicle Championship and Formula Car teams.
- Mentor for E-kart, E-bike, Solar Kart, Boeing Drone Team, and SIH winning teams.

Academic Activity

- Teaching undergraduate engineering courses in Electronics & Communication Engineering.
- Guiding undergraduate projects, multidisciplinary innovation projects, and research activities.
- Mentoring Smart India Hackathon (SIH), Formula Bharat, Electric Kart, Solar Kart, Drone, and Robotics teams.
- Coordinating R&D activities, proposal writing, patent filing, and industry-sponsored projects.
- Established and coordinated multiple Centres of Excellence (CoEs), innovation laboratories, and industry collaborations to promote experiential learning, innovation, and skill development.

- Organized technical workshops, faculty development programs (FDPs), hackathons, industrial visits, and hands-on training programs.
- Facilitated industry internships, placement opportunities, consultancy, and collaborative research through strategic MoUs with leading industries.

Centres of Excellence (CoE) & Industry Collaborations

S. No.	Centre of Excellence / Industry Collaboration	Year
1	Centre of Excellence on Drones (DroneAcarya) established at Dayananda Sagar Academy of Technology & Management (DSATM) in collaboration with Skyriders Aero Solutions, Chennai , to promote drone technology, UAV design, pilot training, and research	2025
2	MOU with Deep Vision Tech AI – AI research collaboration and incubation support	2024
3	Centre of Excellence in SKYLab in collaboration with Skyriders Aero Solutions	2024
4	Centre of Excellence in Industry 4.0 and MOU with Maxbyte Technologies	2024
5	e-Yantra Robotics Laboratory	2023
6	MOU with Deep Vision Tech AI – Student internships and placement support	2022

Faculty Development Activity/Workshops

S. No.	Name of the Event	Date	Resource Person / Organization	Coordinator(s)
	Two-Day Hands-on Workshop on “Powering the Future: Electric Vehicle Design & Innovation	23-24 March, 2026	Er. N. B. Bharath, Dr. Y. Ras Mathew, Er. Sudharsan V CSRM Coimbatore	Dr. Vignesh T, Bharath K N, Roopa K R, Kavyashri G, Deepthi V, Dept. of ECE, DSATM
1	3-Day Hands-on Training on Fixed Wing RC Plane Fabrication	16–18 March 2026	Mr. M. Yuvaraj, Founder & CEO, Skyrider AeroSolutions, Chennai	Dr. T. Vignesh, Prof. Bharath K N, Dr. Mandar Jatkar, Prof. Roopa K R, Prof. Kavyashri G, Dept. of ECE, DSATM
2	Three-Days Hands-on Workshop on Immersive Technologies: AR & VR for the Next Generation Innovators	10–12 November 2025	Mr. Sridhar Sankar, CEO & Founder, Intrino Technologies Pvt. Ltd.	Prof. Vignesh T, Dr. Banani Talukdar, Prof. Bharath K N, Prof. Kavyashri G, Dr. Mandar Jatkar, Dept. of ECE, DSATM
3	Three-Day Hands-on Training on Drone Fabrication	17–19 September 2025	Mr. M. Yuvaraj, Founder & CEO, Skyrider AeroSolutions, Chennai	Prof. Vignesh T, Dr. Banani Talukdar, Prof. Bharath K N, Prof. Kavyashri G, Dr. Mandar Jatkar, Dept. of ECE, DSATM

4	Seminar on Emerging Technologies in Electric Vehicles and Opportunities for Young Engineers	2025 (add exact date)	Er. Bharath N.B., M.E. (Embedded Systems), Technical Trainer – Electric Vehicles, Coimbatore Society of Racing Minds (CSRM)	Prof. Vignesh T, Dr. Banani Talukdar, Prof. Bharath K N, Prof. Kavyashri G, Dept. of ECE, DSATM
5	MoU Signing Ceremony – DeepVision Tech Incubation Center	29.10.2024	Mr. Jayasudan Munsamy, Founder & CEO, DeepVisionTech.AI	Dept. of Mechatronics, SKCET
6	Two-Day Workshop on Robot Operating System (ROS)	26–27 June 2024	Anya Robotics	Dept. of Mechatronics, SKCET
7	Summer Camp on 3D Printing and Robotics	22–24 May 2024	Sri Krishna College of Engineering and Technology (SKCET)	Dept. of Mechatronics, SKCET
8	Two-Day Workshop and Hands-on Training on Unmanned Aerial Vehicles (UAVs)	10–11 March 2023	Mr. M. Yuvaraj, Proprietor & CEO, Sky rider AeroSolutions, Chennai	Dept. of Mechatronics, SKCET
9	Design with Vision – Get Started with Augmented Reality (AR)	23–24 January 2023	Mr. Ravi Kumar, CEO, Hackwit Technologies Pvt. Ltd. & Mr. Ajin Benito, Lead Developer & Unity Project Manager	Dept. of Mechatronics, SKCET
10	Two-Day Faculty Development Programme on Fusion 360	05–06 July 2022	Mr. Robin, Engineer, USAM CAD Soft Solution, Coimbatore	Dept. of Mechatronics, SKCET
11	Taking First Step Towards Machine Learning	11 April 2022	Dr. T. Sujatha, Associate Professor, Department of AI & DS	Dept. of Mechatronics, SKCET
12	How to Process the Data	07 April 2022	Dr. Sajeew Ram Arumugam, Associate Professor, Department of AI & DS, SKCET	Dept. of Mechatronics, SKCET
13	Industry Expert Talk – My Journey from College to Social Entrepreneurship	27 January 2022	Mr. Bonny Dave, Co-founder, Trestle Labs	Dept. of Mechatronics, SKCET
14	MoU Signing Ceremony – DeepVisionTech.AI	22 November 2021	Mr. Jayasudan Munsamy, Founder & CEO, DeepVisionTech.AI	Dept. of Mechatronics, SKCET

Contact Details

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