

Faculty Profile

Name And Designation: Dr. Sudharsan Jayabalan

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Educational Details:

Si No	Degree	College	University / Country	Year	Specialization	Class (%)
1	Bachelor of Engineering (B.E.)	Jerusalem College of Engineering, Chennai	Anna University, India	May 2008	Electronics and Communication Engineering(E.C.E)	First 66 %
2	Master of Engineering (M.E.)	Vel Tech College of Engineering, Chennai	Anna University, India	June 2010	Embedded System Technologies(EST) (E.E.E)	First 72%
3	Ph.D.	College of Engineering, Guindy, Chennai	Anna University, India	Nov 2016	Electrical Engineering (Specialization: Robotics)	--
International Summer School Attended						
S.no	Category	Title	Topics	Organizer	Location	Period
1	Summer School	IEEE Soma Summer School on Soft Manipulation	Robotics, Hand Kinematics, Soft hand manipulation	DLR - German Aerospace Research Centre, Munich	Lake Chiemsee, Germany	7/07/2017 to 21/07/2017

Professional Background:

S.no	Designation	Department	Institute /Organization	Period
1	Associate Professor	Electronics and Communication Engineering	Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad.	12/02/2018 to till date...
2	Associate Professor	Electrical & Electronics Engineering (EEE)	Malla Reddy Institute of Engineering & Technology, Hyderabad, India	14/12/2016 to 15/12/2017
3	Research Scholar	Mechanical Engineering	College of Engineering Guindy, Campus, Anna University, Chennai	23/01/2012 to 29/04/2016
4	Lecturer	E.C.E	Dhaanish Ahmed College of Engineering, Chennai.	10/11/2010 to 11/11/2011
5	Assistant Professor	E.E.E	Vel Tech University, Chennai	02/06/2010 to 30/09/2010

Courses Taught:

- **UG:** Embedded Systems Design, Microprocessor & Microcontroller, Digital Electronics, Mechatronics, Hydraulics & Pneumatics.
- **PG:** Embedded Real Time Operating Systems, Sensors & Actuators, Embedded Networking, Advanced Operating Systems.

PUBLICATIONS:

1. Mounika Sakshinetti, Sudharsan Jayabalan. "Design and Fabrication of SHRALA: Social Humanoid Robot Based on Autonomous Learning Algorithm", *Procedia Computer Science* 171 (2020) 2050–2056.
2. S. Sairam Akhil, N. Arun Vignesh, Sudharsan Jayabalan, E. Karthikeyan, Ayyem Pillai, Ch Usha Kumari, and **Asisa Kumar Panigrahy**. "A Novel Approach for detection of the symptomatic patterns in the acoustic biological signal using Truncation Multiplier." In *2019 2nd International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT)*, vol. 1, pp. 49-53. IEEE, 2019.
3. S. Kanithan, N. Arun Vignesh, Asisa Kumar Panigrahy, V. Ayyem Pillai, E. Karthikeyan, CH Usha Kumari, Sudharsan Jayabalan, and T. Santosh Kumar. "A Survey on Energy Efficient Image Transmission in WSN." In *2019 2nd International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT)*, vol. 1, pp. 41-44. IEEE, 2019.
4. SudharsanJayabalan, Karunamoorthy L, "Path planning and control of 8-Degrees of FreedomBio – Inspired robotic Arm", *International Journal on Simulation and Modelling*, volume 15, Issue No 2, (2016). Pg no: 302- 316.
5. SudharsanJayabalan, Karunamoorthy L, "Simulation of 8-Degrees of Freedom Bio- Inspired Humanoid Robotic Arm using MATLAB/ADAMS Co-Simulation Environment", *Applied Mechanics and Materials*, Volume 799-800 (2015), Pg.no: 1054-1057.
6. SudharsanJayabalan, Karunamoorthy L, "Derivation of forward and inverse kinematics of 8-Degrees of freedom based Bio-Inspired Humanoid Robotic Arm", *Advanced Material Research*, Volume 984-985 (2014), Pg.no: 1245-1252

Reviewer for Journals and Books:

- 1) Robotica
- 2) Defence Science Journal

PROFESSIONAL WORK:

Research and Consultancy Projects				
Si No	Title	Institute/ Organization	Grant	Duration
1	Design of 10-DoF Humanoid Robot for Educational and Industrial Training	Lumisense Technologies, Pvt Ltd, Chennai, India	5,00,000	07/08/2019 to 06/08/2020
2	Design of an Industrial robotic arm for pick and packaging from the assembly line of aluminium wire manufacturing industry	Energycomm Wires, Pvt Ltd, Hyderabad, India	2,00,000	01/10/2018 to 30/09/2019
3	Design of 6-DoF Robotic Arm for Educational and Industrial Training	Lumisense Technologies, Pvt Ltd, Chennai, India	1,25,000	01/10/2018 to 31/03/2019

Invited Speaker / Guest Lectures (Selected)

1. Presented online Guest Lecture on "INTRODUCTION TO INDUSTRY 5.0 WEBINAR" for DEPARTMENT OF MECHANICAL ENGINEERING, ST.JOSEPH'S COLLEGE OF ENGINEERING, On 28/05/2020.

2. Delivered a session titled on “ Smart Manufacturing” in AICTE sponsored ONLINE SHORT TERM TRAINING PROGRAMME(STTP) ONOSMART MANUFACTURING - OPPORTUNITIES AND CHALLENGES, which was held during 13/07/2020 to 18/07/2020 in Organized by DEPARTMENT OF MECHANICAL ENGINEERING, ST.JOSEPH’S COLLEGE OF ENGINEERING, chennai, India,
3. Invited Speaker at “International Conference on Mechanical engineering for automation science”, held on 15/10/2017 organized by Hong Kong Society of mechanical engineers and University of Birmingham, at University of Birmingham, United kingdom.

Workshops Attended (Selected)

1. Participated in IEEE Soma Summer School on Soft Manipulation which was held during 17th June 2017 – 21st June 2017 at Lake Chiemsee, Germany, Organized by: German Aerospace Research Centre (DLR) & IEEE Robotics and Automation Society.

Workshops Organized (Selected)

1. Organized Entrepreneurship Development Program (EDP), June 2017 in Malla Reddy Institute of Engineering and Technology, Hyderabad, India.

Memberships:

IEEE

External Examiner :

M.Tech Embedded Systems Lab Examiner

AWARDS AND ACHIEVEMENTS:

Si. No	Name and Nature of the Award / Honor	Issued at Organization / Event	Year of Award
1	Best Paper Award	ICMEME 2014, International Conference in Singapore	2014
2	Anna Centenary Research Fellow	Anna University, Chennai.	2012 to 2016
3	Best Paper Award	ICPCES 10 International Conference, Chennai	2010
4	President Of Red Ribbon Club	Jerusalem College of Engineering, Chennai	2007
5	Best NSS Volunteer	Jerusalem College of Engineering, Chennai	2006

