Name: Dr. J. ARUNARASI				
Designation:	Professor			
Qualification:	M.E., Ph.D.			
Area of specialization:	COMMUNICATION SYSTEMS & COMMUNICATION	& WIRELESS		
Experience :	Industrial Experience	Teaching Experience		
(As on May 2018)	-	14 Years		
Number of workshop /	Number of Workshops	Number of FDPs		
FDP attended:	11	13		
International Conference and Journals:	19			
Professional Body Membership:	IETE (M-500024), IAENG (238985), IEEE Senior Member (98075671), ISTE (LM 131458)			
Thesis Title:	Performance Enhancement and analysis of wavelet based DS-CDMA system over AWGN and fading channels.			
Achievements & Responsibilities	 Produced 100 % Results -5 times 			
	• Reviewer for Journal of Electrical Engineering and Technology. reputed journal ISSN 2093-7423			
	Department Research Coordinator			
	• Year Co-ordinator			
	 Class Co-ordinator 			
	 Department Tamil mandram Coordinator 			

• Department NBA Criteria 3 incharge.			
 One of the R&D Co-ordinator in Vel Tech Multitech Engineering College. 			
• Mentor for 13 students of 2020-2024 batch.			

Academic Qualification:

Degree	Branch	College, University	Class Obtained	Year of Passing
Ph.D.,	Information & Communication Engineering	Anna University	Recommended	2014
М.Е.,	Applied Electronics	Thanthai Periyar Govt. Inst. of Technology, Anna University	First Class	2005
B.E.,	Electronics and Communication Engineering	Thanthai Periyar Govt. Inst. of Technology, University of Madras	First Class with Distinction	2003

Academic Experience:

S.No.	Name and Address of the Institution	Designation	Period of Experience
1	Sri Sai Ram Engineering college, Sai Leo Nagar, West Tambaram, Chennai-600044.	Associate Professor	December 2018 to till Date
2	Veltech multitech Dr.Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai-600062.	Assistant Professor	1 Yr 4 Months (January 2015 to April 2016)
3	Magna College Of Engineering, Magaral, Chennai-600055.	Assistant Professor	1 Yr 6 Months (July 2013 to December 2014)
4	Magna College Of Engineering, Magaral, Chennai-600055.	Lecturer	4Yr 1 Month (June 2009 to June 2013)
5	SMK Fomra Inst Of Technology, Chennai-603103.	Lecturer	1 Yr 10 Months (December 2006 to September 2008)
6	Vel Multimedia Engineering. College Avadi, Chennai-600062.	Lecturer	1 Yr 4 Months (June 2005 to October 2006)

Book Chapter:

M.Sudhakar, J.Arunarasi and V.Sasikala et al (2021), "Robotics and Automation" in book: COVID-19 and its Impact Publisher: ESN publications Editor: M.Sudhakar ISBN: 978-81-947019-4-1 pp: 173-184.

Technology Transfer:

Delivered Lecture on "**Multiple Access Technique and Cellular Architecture**", Organized by Department of Electronics and Communication Engineering, Saraswathy College of Engineering and Technology on 6th May 2022.

Sl. No.	Title	Organizer	Month/Year		
110.					
1	Arduino step by step Getting Serious	Udemy	30 th March 2020		
2	Artificial Intelligence & Drug Discovery	Shri Vithal Education & Research Institute's College of Pharmacy, Pandharpur, Maharashtra, India	29 th April 2020		
3	Introduction to IoT	Coursera	4 th April 2020		
4	Webinar on the theme Leading in a VUCA World – Day 1	ICT Academy	20 th April 2020		
5	Webinar on the theme Leading in a VUCA World – Day 5	ICT Academy	24 th April 2020		
6	Webinar on The Power of a Teacher	ICT Academy	4 th May 2020		
7	COVID-19: What You Need to Know (CME Eligible)	Osmosis.org (Coursera)	10 th May 2020		
8	Webinar on Electromagnetic pollution hazards of Cell phone base station on environment	Panimalar Institute of Technology.	13 th May 2020		
9	AI for Everyone	Deeplearning.ai (Coursera)	26 th May 2020		
10	Webinar on R&D proposal writing for faculties	Sri Sai Ram Engg. College	12 th June 2020		

Online Courses Completed:

11	Digital Design	Manufact	uring	and	SUNY, Universit (Coursera	y of New		17 th June 2020
12	Remote Degrada	0	of	Land	Indian Institute of Remote Sensing (IIRS)			01-12-2020 to 07-12-2020

Virtual Lab Development:

- Our team (as a faculty) has participated in the development of the Virtual lab experiment (post the completion of the experiment design. (2020-2021 & 2021-2022).
- Virtual Lab experiment was successfully developed by our team, upto the concept stage

in the academic year 2021-2022.

Lab Name: Advanced Communication Lab

Experiment: Digital Link Characterization - Eye diagram and BER.

Journal Publications:

1. **Arunarasi J,** Jyothi Lakshmi, Maragadhavalli L, Kirthikha A "Performance Investigation Of Electric Vehicle Based On Battery Management", Zeinchen Journal (UGC Care), Volume 9, No 1, Page: 38-44, 2023.

- 2. Arunarasi J, Ravula Sonali, Monisha Sankar, , Divya Muruganathan "Implementation of Machine Learning Techniques for detection of Lung Cancer", in Periodico de Mineralogia, Volume 91, No. 3, 2022
- 3. Latha P, Sumitra V, V. Sasikala, **J. Arunarasi**, A. R. Rajini and N. Nithya," Fake Profile Identification in Social Network using Machine Learning and NLP, in IEEE Explore May 2022.
- 4. J. Arunarasi, Sasikala.V, Rajini.A.R, Meena P, Ramanathan M and Vignesh M, " Gesture Controlled Contactless Switch With OLED Display", in IEEE Explore May 2022.
- 5. Arunarasi J, "Improved adaptive LMS algorithm for DS-CDMA Receiver over AWGN and fading channels", in Solid State Technology, Volume: 64, Issue: 2, Page:4803-4811, April 2021.
- 6. Arunarasi J, "Performance analysis of multi-user DS-CDMA using wavelet based diversity schemes", in Tierärztliche Praxis, Vol 41, ISSN: 0303-6286, Page: 803-813, April 2021.

- 7. Sasikala.V, Hariharan.K, Prashanna.B, Vinoth Ganesh, Arunarasi. J, "Smart Industrial Automation Electrical Gripper", in *Journal of Research in Instrumentation and Control Engineering*, Volume 5 Issue 1, Page: 18-27, May 2020.
- 8. D. Logendran, , D. Muruganandam, J. Arunarasi, "Experimental investigation on inherent properties of Hydroxybutanedioic Acid treated banana/sisal fibers based hybrid composite", <u>https://doi.org/10.1016/j.matpr.2020.02.708</u> Available online 25 March 2020.
- 9. J.Arunarasi, S.Aadithya, V.Sasikala, "Emerging trend in Inter-Train Communication System", in *Test Engineering and Management*, March April 2020, ISSN: 0193-4120 Page No. 17471 17473.
- 10. A.Karthikeyan, **J.Arunarasi**, A.Arulmary, "A Neoteric FPGA Architecture with Memristor Based Interconnects for Efficient Power Consumption" –in Indian Journal of Science and Technology published in Vol 9 No 5 Febraury 2016.
- 11. D.Priya, **J.Arunarasi**, A.Arulmary, "Efficient energy and power consumption of 3-D Chip Multiprocessor with NUCA Architecture" in Indian Journal of Science and Technology, published in Vol 9 No 2 January 2016.
- E.Kayalvizhi, A.Karthikeyan, J.Arunarasi, "An Optimal Energy Management System for Electric Vehicles using Firefly Optimization Algorithm based Dynamic EDF Scheduling" in International Journal of Engineering and Technology (IJET), published in Vol 7 No 4 Aug-Sep 2015.
- 13. Arunarasi and P.N. Jebarani Sargunar, "Performance Comparison of DS-CDMA system using Wavelet based shrinkage methods" in International Journal of Applied Engineering and Research, Volume 10, Number 10, pp. 25773-25788, 2015.
- 14. J. Arunarasi and P.Indumathi, "Performance analysis of DS-CDMA system over AWGN and fading channels based on diversity scheme", in Journal of Theoretical and Applied Information Technology, published in Vol. 52, Issuel, 10th June 2013.
- 15. J. Arunarasi and P.Indumathi, "Combined Wiener and Double Density Discrete Wavelet Filter Based Algorithm for Noise Reduction in CDMA Receiver" in European Journal of Scientific Research published in, Vol. 53, Issue 2, pp.269-279, May 2011.
- 16. J. Arunarasi & Indumathy Pushpam 2010, "A New Threshold Calculation Approach in the Performance Enhancement of Spread Spectrum System Using Double Density Discrete Wavelet Filter", Information and Communication Technologies, Communications in Computer and Information Science, vol. 101, Part 3, pp.654-659.

Conference Publications:

J. Arunarasi and P.Indumathi, "A New Threshold Calculation Approach in the Performance of Spread Spectrum system using DD-DWT filter" in the International Conference on Advances in Information and Communication Technologies – ICT 2010, at Kochi, Kerala (published by Springer).

J. Arunarasi, "Lung Cancer detection using machine learning Techniques" in the 10th International Conference on Contemporary Engineering and Technology 2022, at Prince Shri Venkateswara Padmavathy Engineering College, Chennai on 21st and 22nd may 2022.

J. Arunarasi and P.Indumathi, "A New Threshold Calculation Approach in the Performance of Spread Spectrum system using DD-DWT filter" in the International Conference on Advances in Information and Communication Technologies – ICT 2010, at Kochi, Kerala (published by Springer).

Workshops/Seminars Details:

- 1. Attended Workshop on "Emerging Trends in VLSI and ASIC Designs" at Anna University during 7th April 2007.
- 2. Attended Workshop on "Telecommunication and Information Technology" organized by Falcon Electro-Tek pvt. Ltd on 7th December 2007.
- 3. Attended Workshop on Wireless Sensor Networks" at SSN College of Engineering from 18th to 19th April 2008.
- 4. Attended National Workshop on "MATLAB and its Applications" at National Institute of Technical Teachers Training and Research on 21st and 22nd May 2009.
- 5. Attended National Workshop on "Recent trends in Wireless Networks" at Easwari Engineering College during 22nd August 2009.
- 6. National Workshop on "Recent trends in Mobile Communication" at Jerusalem College of Engineering from 19th to 20th November 2009.
- 7. Seminar on "Understanding Digital and Cellular Standards and their measurements", conducted by IIT Mumbai, at Madras Institute of Technology during 30th April 2010.
- National Seminar on "Guidelines to Sponsored Research Projects", at Dhanalakshmi College of Engineering, during 6th May 2010.
- One day National workshop on Fiber Optics held on March 4, 2015 at Vel Tech Dr. RR & Dr. SR Technical University.
- 10. A seven days Faculty Development Program on Computer Aided Design from 10th 18th June 2015 in Vel Tech Multitech Dr.Rangarajan & Dr.Sakuntala Engineering College.
- 11. Attended Workshop on Outcome Based Education" at Sri Sairam Engineering College on 5th April 2019.

FDP Details:

1. Attended FDP "Introduction to Industry 4.0 and Industrial Internet of Things" NPTEL Online Course from Jul-Oct 2022.

- 2. Attended offline FDP "Universal Human Values 2" at Sri Sairam Engineering College Course from 26 Jul- 30 Jul 2022.
- 3. Attended FDP "Introduction to Industry 4.0 and Industrial Internet of Things" NPTEL Online Course from Jul-Oct 2022.
- 4. Attended FDP "Capacity Building through Emotional Intelligence for Women" organized by AICTE Training And Learning (ATAL) Academy from 16-08-2021 to 20-08-2021.
- 5. Attended FDP "Augmented Reality / Virtual Reality and its Applications, "Capacity Building through Emotional Intelligence for Women" organized by AICTE Training And Learning (ATAL) Academy from 04-10-2021 to 08-10-2021.
- 6. Attended FDP "Patent Drafting for Beginners" NPTEL Online Course from Jan-Feb 2022.
- 7. Attended FDP "Cloud Computing" organized by NPTEL AICTE from Aug Oct 2021.
- Attended FDP "Ad-hoc and Wireless Sensor Networks" organized by Sri Sairam Institute of Technology 22nd - 27th June 2020
- 9. Attended Online FDP "Internet of Things (IoT)" organized by AICTE Training And Learning (ATAL) Academy from 30-11-2020 to 4-12-2020
- 10. Attended Online FDP "Design Thinking" organized by AICTE Training And Learning (ATAL) Academy from 12-10-2020 to 16-10-2020.
- 11. Attended Online Spoken FDP "Advance Communication Laboratory" organized by PSNA College of Engineering and Technology from 20th 27th July 2020.
- 12. Attended FDP "Ad-hoc and Wireless Sensor Networks" organized by Sri Sairam Institute of Technology 22nd 27th June 2020.
- 13. Attended FDP "Data Science for Engineers" organized by NPTEL AICTE from Jul Sep 2019.
- 14. Attended FDP "Principles of Communication-I" NPTEL Online Course from Jan-April 2019
- 15. Attended FDP "Robotics" organized by Sri Sairam Engineering College from 13th- 18th May 2019.
- 16. Attended FDP "Computer Aided Design" organized by Vel Tech Multitech Dr.Rangarajan & Dr.Sakuntala Engineering College from 10th 18th June 2015

STTP Details:

- 1. AICTE Sponsored One Week Online STTP "SciLab: An Effective Open Source Tool for Computer Vision and Machine Learning" organized by Vidya Jyothi Institute of Technology from 02-11-2020 to 07-11-2020
- AICTE Sponsored One Week Online STTP "Recent Emerging Trends in Wireless Communication using IoT" organized by Vidya Jyothi Institute of Technology from 09-11-2020 to 16-11-2020

Workshop/Conference/FDP Organized:

- 1. Coordinator for "International Conference in Magna on Emerging Engineering Trends ICMEET 2013" in Magna College of Engineering.
- 2. Convener for "International Conference in Magna on Emerging Engineering Trends ICMEET 2014" in Magna College of Engineering.
- Organized 2 days DST-FIST sponsored workshop on "RF measurements using Network Analyzer for Wireless Communication" in the Department of ECE, Vel Tech Multitech Engineering College, Chennai on 28th & 29th January 2016.
- 4. Coordinator for five day Faculty Development Programme on, " Recent trends in 5 G Communication Networks", at Sri Sairam Engineering College between 26,12,2922 and 30.12.2022.

NITTT Modules Completed:

Module 1: Orientation Towards Technical Education and Curriculum Aspects.

Module 3: Communication Skills, Modes and Knowledge Dissemination.

Module 7: Creative Problem Solving, Innovation and Meaningful R& D.

Reference:

- 1. Dr.P.Indumathi –Professor, Department of Electronics, MIT Campus, Anna University, Chennai.
- 2. Dr.A.Kalanidhi--Former Vice-Chancellor, Anna University, Chennai.

Dr.J.ARUNARASI