

Department of Electronics and Communication Engineering

Personal Details

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| Name: | Dr.V.Mangaiyarkarasi |
| Designation: | Professor |
| Educational Qualification: | M.E.,Ph.D. |
| Experience: | 18years |
| Area of Specialization: | VLSI |

Educational Details

| S.No. | Degree | Branch/Specialization | Institute/University | Year |
|-------|--------|---|---|------|
| 1 | B.E | Electronics & Communication Engineering | Bhatathidhasan University | 2003 |
| 2 | M.E | Process Control | Annamalai University | 2005 |
| 3 | Ph.D. | VLSI | St.Peter's Institute of Higher Education and Research | 2019 |

Publication Details

Journal

1. Mangaiyarkarasi V. et al., " Modeling and Control of Binary Distillation Column", International Journal of Advanced research in Electrical, Electronics and Instrumentation Engineering, Vol.3, pp105-111,2014
2. Mangaiyarkarasi V. et al., " Design Modeling and Characterization of Robotic Fish for Aquatic Monitoring", International Journal of Advanced Research in Electronics and Communication Engineering(IJARECE), Vol .5,No.2,pp 444-447,2016(Impact Factor: 4025)
3. Mangaiyarkarasi et al., "Control of Heat Exchanger Using Internal Model Controller", International Organization of Scientific Research, Vol. 3, No. 7, pp 10-15, 2013

4. Mangaiyarkarasi V. et al., "Electromagnetic Vibration Energy Harvester Using Labview", International Journal of Electronics Communication & Instrumentation Engineering research and Development(IJECIERD), Vol. 5, No. 3, pp 51-60,2015
5. Mangaiyarkarasi V., et al., "Automated Medical Waste Segregation Machine Using Arduino Controller", International Journal of Advanced research trends in Engineering and technology (IJARTET), Vol. 5, pp 30-36,2018
6. Mangaiyarkarasi V. et al., "Measurement of GHT(Glucose, Heart Rate, Temperature) Using Non-Invasive Method", International Journal of Trend in Scientific Research and Development(IJTSRD), Vol. 3, No. 3, pp 135-137,2019
7. V. Mangaiyarkarasi A.P et al., 'Performance Examination of OFDM Modulation Techniques in LTE 4G', in the International Journal of Engineering and Advanced Technology (IJEAT) ,Volume 9, Issue2, Page No. 3401-3404,ISSN: 2249-8958,December-2019.
8. Ms.V.Mangaiyarkarasi.et al.,"Virtual Fog Removal for Roadway Vehicles" in A Journal of Composition Theory(JCT)Volume XIV, Issue IV, APRIL 2021 ,ISSN : 0731-6755
9. Ms.V.Mangaiyarkarasi.et al.,"A Smart Vehicle System For AccidentPrevention Using Machine Learning" in A Journal of Composition Theory(JCT)Volume XIV, Issue III, MARCH 2021,ISSN : 0731-6755
10. Ms.V.Mangaiyarkarasi.et al.,"Smart Reader For Visually Impaired People Using Raspberry-Pi" in A Journal of Composition Theory(JCT)Volume XV, Issue IV, APRIL 2022, ISSN : 0731-6755
11. Ms.V.Mangaiyarkarasi.et al.,"Design A Virtual Telepresence Robot Using Virtual Reality" in Semiconductor Optoelectronics Volume 41, Issue IV, DECEMBER 2022,Page no:476-481ISSN :1001-5868
12. Mangaiyarkarasi, V., et al.,, " Area Efficient 64-Point Split Radix FFT using Single-Path Delay Feedback and Multi-path Delay Commutator(SDF-MDC) Architecture", Asian Journal of Research in Social Sciences and Humanities. <http://dx.doi.org/10.5958/2249-7315.2017.00002.8>,vol .7,January 2017.
13. Mangaiyarkarasi V, et al.,, "Design of Optimized Bit parallel Multiplier Based 32- Point Mixed R2SDF-R4MDC FFT Architecture", International Journal of Applied Engineering research, Vol.11,No 6, pp.4445-4450,2016
14. Mangaiyarkarasi V, et al., "Simulation of 32-Point Split –Radix Multipath Delay Commutator(SRMDC) Based FFT Architecture", Indian Journal of Science and Technology, Vol.9, No 31, DOI: 10.17485/ijst2016/v9i31/94595, 2016

15. Mangaiyarkarasi V, et al., “ Performance analysis between Radix2, Radix4, Mixed Radix4-2 and Mixed Radix8-2 FFT” Proceedings of 2nd International conference on Current Trends in Engineering and Technology, ICCTET’14, 2014
16. Ms.V.Mangaiyarkarasi.et al., “Advanced Driver Assistance System”, in International Journal of Advance Research and Innovative Ideas in Education, Volume: 06, Issue: 02, Feb 2020.
17. Ms.M.RamjanBegum&Ms.V.Mangaiyarkarasi, “Control of Single phase transformer-less Rectifier”, A Journal of Composition Theory, Volume XIV, Issue III, March 2021.
18. Ms.V.Mangaiyarkarasi.et al., “Development of an Integrated Water Body Surveillance System for Environmental Monitoring and Resource Management” International Conference on Communication, Computing and Internet of Things (IC3IOT), 2024.
19. Ms.V.Mangaiyarkarasi.et al., “Enhancing Fisherman's Safety with Border Alerting System”, International Conference on Communication, Computing and Internet of Things (IC3IOT), 2024.
20. Ms.V.Mangaiyarkarasi.et al.,” Mind Controlled Prosthetic ARM”, International Conference on Communication, Computing and Internet of Things (IC3IOT), 2024.
21. Ms.V.Mangaiyarkarasi.et al., “Cancer Chemoradiation Powered by Nanotechnology: Realizing the Full Potential of Radiotherapy with Gold NP-BM”, Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), 2023.
22. Ms.V.Mangaiyarkarasi.et al., “ESP-8266-Based Indoor Localization System” Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), 2023.

Conference

1. Rajalakshmi K, and Mangaiyarkarasi V, “ Design of Internal Model Controller for a Heat Exchanger System” International Conference on Information Communication & Embedded Systems (ICIES 2013) on 21st& 22nd February 2013 in S.A Engineering College, Chennai.
- Sharmila.M and Mangaiyarkarasi.V, ”Performance Evaluation of PI and IMC Controller for Binary Distillation Column”, International Conference on Innovative Research in Engineering & Technology 2014 (ICIRET-2014) on 2nd and 3rd May 2014, E.G.S Pillay Engineering College, Nagapattinam, 2014
2. Divya C.N and Mangaiyarkarasi.V, ”Design and Implementation of Electromagnetic Vibration Energy Harvester”, International Conference on Recent Innovations in Engineering & Technology (ICRIET’15) on 13th& 14th February 2015 , Mahabarathi Engineering College, Villupuram, 2015

3. Mangaiyarkarasi .V “ Design of Temperature Controller for a Heat exchanger system”, National conference on Modelling, Simulation and Optimization on 2nd November 2012 in the Department of Mechanical Engineering, VELS University, Chennai-117, 2012
4. Rajalakshmi .K and Mangaiyarkarasi .V” Controller Design for a Heat Exchanger System”, National Conference on Advances in Electrical Energy Applications(AEEA-2013) in the Department of Electrical & Electronics Engineering, Velammal Institute of Technology, Chennai, 2013
5. Rajalakshmi.K and Mangaiyarkarasi .V, “ Design of Controller for a shell and Tube Heat Exchanger system” National Conference on Intelligent Computing in Instrumentation and Communication(NCICIC-2013) on 25th March 2013 in the Department of Electronics & Instrumentation Engineering, Sri Sairam Engineering College, Chennai, 2013
6. Mangaiyarkarasi .V “Control of Heat Exchanger Using Internal Model Controller”, 2nd National Conference AGNICON 2013 on 26th March 2013, Agni College of Technology, Chennai, 2013
7. Sharmila.M and Mangaiyarkarasi .V”Modelling and Control of Binary Distillation Column”, National Conference on Innovative Techniques in Power Engineering & Drives (ITPED-2014) in the Department of Electrical & Electronics Engineering, Velammal Engineering College, Chennai, 2014
8. Sharmila M and Mangaiyarkarasi V. “Comparitive analysis of PI and IMC Controller for Binary Distillation Column” Proceedings of the National Conference on Social Transformation Through research achievements in Electrical Engineering STRAFE’14 on March 2014 in Sethu Institute of Technology, Virudhunagar, 2014
9. Divya C.N and Mangaiyarkarasi V, “Implementation of Linear Arrangement of Electromagnetic Vibration Energy Harvester ” 2nd National Conference on Emerging Trends in Eletronics, Instrumentation and Control(ETEIC 2015) on 11th April 2015 in the Department of Electronics & Instrumentation Engineering, VEC, Chennai. 2015
10. Rahul.S and Mangaiyarkarasi .V,”Aquatic Monitoring Techniques (ROBOTIC FISH)”, National Conference on Communication& Computing(NCCC-16) on 9th March 2016 in the Department of ECE, SRM University, Ramapuram Campus, Chennai, 2016.

Professional Society Membership

1. ISTE (The Indian Society for Technical Education)Life Member:
2. IAENG(International Association of Engineers) IAENG Member:
3. Institute of Electrical and Electronics Engineers

Program Attended

Workshop/FDP/Webinar Attended:

1. Participated in Faculty Development Programme on EE 2351 – Power System Analysis Conducted at Valliammai Engineering College, Chennai from 9th to 16th December 2013(ANNA UNIVERSITY)
2. Participated in the Faculty Development Programme for ‘EE8591-Digital Signal Processing’ from 10-6-2019 to 15-6-2019, organized by the Department of Electronics&Instrumentation Engineering, SRM Valliammai Engineering College, Chennai. (ANNA UNIVERSITY)
3. Participated in the Faculty Development Programme for ‘Image and Embedded Processing ‘from 27.04.2020 to 01.05.2020, organized by NITTTR, Chandigarh.
4. Participated in the Faculty Development Programme for ‘Data Science Using R’ from 11.05.2020 to 15.05.2020, organized by NITTTR, Chandigarh .
5. Participated in MHRD sponsored Refresher Course on Recent trends in Innovation, Computing, Communication and teaching Methodology Competency from 04.05.2020 to 17.05.2020 organized by Sri Sairam Engineering College.
6. Participated in MHRD sponsored Refresher Course on Recent trends in Electrical, Electronics, Instrumentation, Automation and Teaching Pedagogy from 18.05.2020 to 30.05.2020 organized by Sri Sairam Engineering College.
7. Participated in FDP on Data Science Using R and Python from 20.04.2020 to 30.05.2020 organized by Spoken Tutorial Project, IIT Bombay
8. Participated in FDP on Artificial Intelligence from 07.12.2020 to 11.12.2020 organized by AICTE Training and Learning Academy(ATAL)
9. Participated in FDP on Internet of Things(IoT) from 21.12.2020 to 25.12.2020 organized by AICTE Training and Learning Academy(ATAL)
10. Participated in AICTE sponsored STTP on Modern Optimization Tools in Engineering Field-I (Season-1) from 05.10.2020 to 10.10.2020 organized by SRM valliammai Engineering College,Chennai
11. Participated in AICTE sponsored STTP on Modern Optimization Tools in Engineering Field-II

- (Season-2) from 19.10.2020 to 24.10.2020 organized by SRM valliammai Engineering College,Chennai
12. Participated in AICTE sponsored STTP on Modern Optimization Tools in Engineering Field-III (Season-3) from 02.11.2020 to 07.11.2020 organized by SRM valliammai Engineering College,Chennai
 13. Participated in AICTE sponsored STTP on Modern Optimization Tools in Engineering Field-V (Season-5) from 07.12.2020 to 12.12.2020 organized by SRM valliammai Engineering College,Chennai
 14. Participated in AICTE sponsored STTP on Applications of AI towards Industry 4.0 from 16.11.2020 to 21.11.2020 (Slot-1) organized by Sri Sairam Engineering College.
 15. Participated in AICTE sponsored STTP on Applications of AI towards Industry 4.0 from 14.12.2020 to 19.12.2020 (Slot-2) organized by Sri Sairam Engineering College.
 16. Participated in AICTE sponsored STTP on Applications of AI towards Industry 4.0 from 18.01.2021 to 23.01.2021 (Slot-3) organized by Sri Sairam Engineering College.
 17. Participated in FDP on Get Ready for AI ITH matlab and Simulink from 18.06.2020 to 20.06.2020 organized by Sri Sairam Engineering College.
 18. Participated in FDP on Essentials of Outcome Based Education from 15-03-21 to 19 -03 21 organized by Dr.MGR Educational and Research Institute.
 19. Participated in ISTE Sponsored FDP on Bio-Inspired Learning from 20-12-21 to 24-12-21 organized by Sri Sairam Engineering College.
 20. Participated in the Faculty Development Programme for ‘Digital Signal Processing using MATLAB’ from 03.05.2021 to 14.05.2021, organized by NITTTR, Chandigarh.
 21. Participated in the Faculty Development Programme for “CEC 331-4G/5G Communication Networks “from 29-01-2024 to 03-02-2024 at Loyola-ICAM College of Engineering and Technology, Chennai.
 22. Participated in the Faculty Development Programme for “Research-The Journey for Inception to Publishing” from 05-02-2024 to 09-02-2024 at Dhanraj Baid Jain College, Chennai

Other Details

Resource Person for FDP/STTP/ Value Added Course:

1. Acted as a resource person for the Value added Course on Virtual Instrumentation Using Labview conducted from 5th February to 23rd February 2016 at Valliammai Engineering College.
2. Acted as a resource person for the Value added course on Challenges and opportunities in Embedded control based Instrumentation conducted from 2nd February 2018 to 6th March 2018 at Valliammai

Engineering College

3. Acted as a resource person for the Faculty Development Programme on VLSI Design on 2nd& 3rd June 2016 organised by the Department of Electronics & Instrumentation Engineering, Valliammai Engineering College, Chennai.
4. Acted as a resource person for the Faculty Development Programme on Control Of Process and the Concepts of Electrical Machines from 12th November to 17th November 2018 organised by the Department of Electronics & Instrumentation Engineering, Valliammai Engineering College, Chennai.
5. Acted as a resource person for AICTE sponsored STTP on Modern Optimization Tools in Engineering Field-Iv (Season-4) from 16.11.2020 to 21.11.2020 organized by SRM Valliammai Engineering College, Chennai
6. Acted as a resource person for AICTE sponsored STTP on on Applications of AI towards Industry 4.0 from 18.01.2021 to 23.01.2021 (Slot-3)) organized by Sri Sairam Engineering College.

PATENT Filing:

1. A Machine Learning Based Automated Toilet Cleansing System with Automated Doors – **202041044307**
2. Machine Learning Based Techie Safety Belt To Prevent The Sleepiness Of Drivers – **202041044323**
3. An Automatic Hospital Stretcher That Monitors Vital Data's Of The Patients - **202041044322**

NITTTR module:

- Completed the 8 weeks course on Module 1: Orientation towards Technical Education and Curriculum Aspects in March 2021.
- Completed the 8 weeks course on Module 2: Professional Ethics & Sustainability February 2022.
- Completed the 8 weeks course on Module 3: Communication Skills, Modes & Knowledge Dissemination in February 2022.
- Completed the 8 weeks course on Module 5: Technology Enabled Learning & Life Long Self Learning in February 2022.
- Completed the 8 weeks course on Module 4: Instructional Planning and Delivery in December 2022.

NPTEL online Courses:

- Completed the 4 weeks course on Gender Justice and Workplace security with Elite category in Sep 2018.
- Completed the 4 weeks course on Outcome Based Pedagogic Principles for Effective

teaching with Elite category in Aug 2017.

- Completed the 4 week's course on Introduction to research in March 2016.
- Completed the 12 weeks Course on Discrete Time Signal Processing in March 2017.
- Completed 4 Weeks Course on Stress Management in Sep 2018.
- Completed 4 weeks course on Body Language in sep 2019.
- Completed 8 weeks course on Educational Leadership in sep 2022.

OTHER CERTIFICATE COURSES:

- Completed Online Course on NoSQL and DBaaS101 in 03.05.2020 organized by Future Skills Nasscom.
- Completed Online Course on Moving Data into Hadoop in 21.04.2020 organized by Future Skills Nasscom.
- Completed Online Course on Course on Hadoop 101 in 20.04.2020 organized by Future Skills Nasscom.
- Completed Online Course on Introduction to Artificial Intelligence in 11.04.2020 organized by Simplilearn.
- Completed Online Course on Cyber Security in 12.04.2020 organized by Simplilearn.
- Completed Online Course on Artificial Intelligence for Beginners: Neural Networks in 20.04.2020 organized by Udemy.