# Faculty Profile

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| 1. | Name of the Faculty : | Dr. T.S.MURUGESH |
| 2. | Designation : | Associate Professor (CAS) |
| 3. | Department: | Electronics and Communication Engineering |
| 4. | Date of Joining : | 02-08-2000 (22-07-2019 @ GCE Srirangam) |
| 5. | Faculty ID: | AICTE ID: 7488985509 |
| | | ANNA UNIVERSITY ID: 8301133 |
| 6. | E-Mail Address : | tsmurugesh@gmail.com / tsmurugesh@gces.edu.in / tsmurugesh@yahoo.com |
| 7. | Date of Birth : | 23-12-1977 |
| 8. | Qualification : | B.E, M.E, PhD |
| 9. | Specialization : | Analog and Digital Electronics, System Design, Circuits, Control System, IoT, AI, ML, DL, Computational Bioengineering, Process Control & Instrumentation |
| 10. | Professional Experience: | 24 Years 07 Month 23 days (as on 25-03-2025) |
| 11. | Research Guidance: | Two PhD Scholars (Thesis Submitted) |
| 12. | Awards and Honors : | M.E (First Class with Distinction) |

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| 13. | Sponsored Projects: | 01 |
| 14. | Patents: | UK Patents Granted - 03<br>Indian Design Patents Granted - 05<br>Indian Patents Filed – 03 (Awaiting Grant)<br>Indian Utility Patents Published - 07 |
| 15. | Publications(Proof to be Enclosed – First page only) | |
| | (i) International Referred Journals : | 25 |
| | (ii) National Journals: | 01 |
| | (iii) International Conferences: | 04 |
| | (iv) National Conferences: | 03 |
| | (v) Poster Presentations | 02 |
| | (vi) Book Chapters | 06 |
| | (vii) Books Published With ISBN Number/~~ISSN~~ Number: | 09 + 02 (Under Proof Check) |
| 16. | Conferences/Workshops/Seminar/ Short Term Refresher Courses Attended (Proof to be Enclosed) | List Enclosed |
| 17. | Conferences/Workshops/ Seminars Organized | 02 |
| 18. | Invited Talks Delivered At International Level | 04 |
| | Invited Talks Delivered At National Level | 32 |
| | Other Notable Contributions | List Enclosed |
| | Reviewer For | List Enclosed |
| | Examinership | List Enclosed |

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|---|---|---|
| | Committee Membership | List Enclosed |
| | International Level Hackathon Participation | List Enclosed |
| | Funding/Grant Sanctioned | List Enclosed |
| | Certifications | List Enclosed |
| **Membership In Professional Bodies** The Institution of Engineers (India) - M-1626390 | | |

## LIST OF PATENTS

### ***14. i. UK Patents Granted***

1. **UK Design Application Number:** 6384192, $CO_2$ Detection Device for identifying Human Respiration in Debris. **Grant Date:** 20 August 2024. **Publication date:** 21 August 2024. **Inventors: Dr. T. S. Murugesh**, Dr. M. Senthilkumar, Dr. R. Durga, Dr. M. Abirami & Dr. S. Anbu.

2. **UK Design Application Number:** 6388859, Thermal Imaging Drone for Rapid Search and Rescue Operations. **Grant Date:** 13 September 2024. **Publication date:** 14 September 2024. **Inventors:** Dr. M. Senthilkumar, Dr. R. Durga, Dr. M. Abirami, Dr. S. Anbu & **Dr. T. S. Murugesh**.

3. **UK Design Application Number:** 6406094, Signal Enhancement Antenna with Reduced SNR for High-Frequency Wireless Communication. **Grant Date:** 30 November 2024. **Publication date: 0**1 December 2024. **Inventors: Dr. T. S. Murugesh** et al.

### ***ii. Indian Design Patents Granted***

1. **Application Number:** 420089-001, Interactive Wind-Solar Energy Integration Educational Set, Filed on 14/06/2024. **Grant Date:** 29 August 2024. **Inventors:** Dr. M. Senthilkumar, **Dr. T. S. Murugesh** et al. (**Design Accepted and Published**, Journal No is 35/2024 and Journal Date is 30/08/2024)

2. **Application Number:** 421855-001, Wearable ECG Monitoring Device with Bluetooth Connectivity, Filed on 01/07/2024. **Grant Date:** 13 September 2024. **Inventors:** Dr. M. Abirami, Dr. S. Anbu, **Dr. T. S. Murugesh**, Dr. M. Senthilkumar & Dr. R. Durga. (**Design Accepted and Published**, Journal No is 37/2024 and Journal Date is 13/09/2024)

3. **Application Number:** 419089-001, AI-Powered IoT solutions for Predictive Maintenance in Aviation, Filed on 05/06/2024. Inventors: Dr. Kanwaljit Kaur, **Dr. T. S. Murugesh** et al. (**Design Accepted and Published,** Journal No is 50/2024 and Journal Date is 13/12/2024)

4. **Application Number:** 438890-001, Portable Food Warming Device for On-the-Go Meals, Filed on 26/11/2024. Inventors: **Dr. T. S. Murugesh**, Dr. M. Senthilkumar et al. (Design Accepted and Published, Journal No is 05/2025 and Journal Date is 31/01/2025)

5. **Application Number:** 439474-001, Smart Underground Drainage Clogging Detection System with Real-Time Alerts for Rainy Seasons. Filed on 04/12/2024. Inventors: **Dr. T. S. Murugesh**, Dr. M. Senthilkumar et al. (Design Accepted and Published, Journal No is 09/2025 and Journal Date is 28/02/2025)

### ***iii. Indian Patents Filed (Awaiting Grant)***

1. **Application Number:** 426513-001, Deep Learning - Enhanced Mechanical Harvesting Device, Filed on 12/08/2024. **Inventors:** Dr. S. Anbu, **Dr. T. S. Murugesh**, Dr. M. Senthilkumar, Dr. R. Durga & Dr. M. Abirami. (Examination Report has been Generated, Online Reply Document Received (FER generated on 18/10/2024))

2. **Application Number:** 439454-001, IoT-Enabled Firecracker Explosion Detection Device with Alarm System. Filed on 04/12/2024. **Inventors:** Dr. M. Senthilkumar, **Dr. T. S. Murugesh** et al. (Examination Report has been Generated, Case is Waiting for Examination Report Reply (FER generated on 23/01/2025))

3. **Application Number:** 440018-001, Wireless IoT-Driven Crack Detection System for Enhanced Railway Track Safety. Filed on 10/12/2024. **Inventors: Dr. T. S. Murugesh**, Dr. M. Senthilkumar et al. (Examination Report has been Generated, Case is Waiting for Examination Report Reply (FER generated on 17/01/2025))

### ***iv. Indian Utility Patents Published***

1. **Application Number:** 202441006021, Solar Powered Sun Visor with Microcontroller Based Extension and Contraction Mechanism, Filed on 30/01/2024. **Inventors:** Shriram K V, Akila M, **T.S Murugesh**, Sini Raj Pulari, et. al. **Publication Date:** 03/01/2025

2. **Application Number:** 202441011616, An Intelligent Hearing Device with Automated Intrusion Responding System and the method thereof. **Filed on**: 20/02/2024. **Inventors:** Shriram K V, **T S Murugesh**, Sini Raj et al. **Publication Date**: 28/06/2024.

3. **Application Number:** 202441044728, Machine Learning-Based Optimal Cell Balancing Mechanism for Electric Vehicle Battery Management System, Filed on 10/06/2024. **Inventors: Dr. T. S. Murugesh**, Dr. M. Senthilkumar, Dr. R. Durga, Dr. M. Abirami, Dr. S. Anbu et al. **Published on** 21/06/2024.

4. **Application Number:** 202441044797, Machine Learning-Based Diagnostic Tool for Early Stage Lung Cancer Detection, Filed on 10/06/2024. **Inventors: Dr. T. S. Murugesh**, Dr. M. Senthilkumar, Dr. R. Durga, Dr. M. Abirami & Dr. S. Anbu. **Published on** 21/06/2024.

5. **Application Number:** 202441044864, Automated Quality Control in Chemical Manufacturing Using Computer Vision and Machine Learning, Filed on 10/06/2024. **Inventors: Dr. T. S. Murugesh**, Dr. M. Senthilkumar et al. **Published on** 21/06/2024.

6. **Application Number:** 202441045152, Artificial Intelligence-Enhanced Control Systems for PV Cell Integration in Smart Grids, Filed on 11/06/2024. **Inventors:** Dr. R. Durga, Dr. M. Abirami, Dr. S. Anbu, **Dr. T. S. Murugesh** & Dr. M. Senthilkumar. **Published on** 21/06/2024.

7. **Application Number:** 202441046601, Deep Learning based System for Early Detection of Diabetic Retinopathy, Filed on 17/06/2024. **Inventors: Dr. T. S. Murugesh**, Dr. M. Senthilkumar et al. **Published on** 21/06/2024.

## LIST OF PUBLICATIONS

### ***15. i. International Referred Journals***

1. **Murugesh T S**, Krishnan J and Malathi R, Effects of Gap Junction Conductance in Synchronizing Cardiac Oscillators. CiiT International Journal of Biometrics and Bioinformatics Vol.4, No.10, pp. 454-458, 2012.

2. **T.S. Murugesh** and B. Balraj, Secured Data Transmission by Blowfish Algorithm using OFDM, CiiT International Journal of Networking and Communication Engineering Vol.4, No.14, pp. 831-836, 2012.

3. **Murugesh T S**, Krishnan J and Malathi R, Certain investigations on the gap junction conductance in synchronization issues. International Journal of Research and Reviews in Applied Sciences Vol.15, Issue 3, pp. 312-321, 2013.

4. **Murugesh T S**, Krishnan J and Malathi R, Investigations on the intrinsic frequency of the cardiac cells in effecting synchronization. International Journal of Current Research Vol.5, Issue 10, pp. 3140-3148, 2013.

5. R.Narmatha, **T.S.Murugesh** and J.Krishnan, Design of an Intelligent Control Scheme for Synchronizing Two Coupled Van Der Pol Oscillators. International Journal of ChemTech Research Vol.6, No.12, pp. 5033-5048, 2014. (Scopus Indexed)

6. **T S Murugesh**, Assessment of Gap Junctional Conductance Magnitude in Cardiac Synchronization - A Computational Study. Journal of Emerging Technologies and Innovative Research Vol.2, Issue 12, pp. 258-266, 2015. (UGC Approved)

7. **T S Murugesh**, Achieving Synchronization in Cardiac Oscillators with Suitable Neural Input. Asian Journal of Electrical Sciences Vol.5, No.1, pp. 43-53, 2016. (UGC Approved)

8. **T. S. Murugesh** and M. Senthilkumar, Control Techniques for Synchronizing the States of Two Coupled Van der Pol Oscillators. Asian Journal of Engineering and Applied Technology Vol.5 No.2, 2016, pp. 44-50, 2016. (UGC Approved)

9. M.Senthilkumar and **T.S.Murugesh**, Design of Decentralized Controller Using RNGA for a Coupled Tank Process, Asian Journal of Electrical Sciences, Volume 5, Number 2, 2016, pp. 62-66. 2016. (UGC Approved)

10. **T S Murugesh**, M Senthilkumar and S Anbu, The Analogy of Coupled Oscillators. Journal of Emerging Technologies and Innovative Research Vol.5, Issue 8, pp. 811-816, August 2018, ISSN: 2349-5162. (UGC Approved)

11. Seshu Kumar Chegu, **T.S.Murugesh** and V. Rajeswari, Design of ZN Controller for Coupled Tank System. Journal of Advanced Research in Dynamical and Control Systems Vol. 11, 03-Special Issue, pp. 1643-1650, 2019. ISSN: 1943-023X (Scopus Indexed)

12. S.Mohanraj, **T.S.Murugesh**, M.Senthilkumar, "Design of decentralized controller for coupled tank system using BLT method.", Elsevier, Materials Today: Proceedings, Volume 46, Number 20, Mar 2021, pp. 11198-11201. (Scopus Indexed) **https://doi.org/10.1016/j.matpr.2021.02.410**

13. P.L.Arunkumar, M.Ramaswamy, **T.S.Murugesh**, IoT based Speed Control for Semi-Autonomous Electric On-Road Cargo Vehicle. International Journal of Advanced Computer Science and Applications (IJACSA). Vol.13, No.3, pp. 263-272. 2022. ISSN: 2156-5570 (Online) ISSN: 2158-107X (Print) (Indexed in Web of Science & Scopus) **DOI: 10.14569/IJACSA.2022.0130333**

14. Arunkumar Palaniappan, Ramaswamy Muthiah, **Murugesh T**iruchi **S**undaram, ZigBee enabled IoT based intelligent lane control system for autonomous agricultural electric vehicle application. Volume 23, July 2023, Article 101512. **SoftwareX Elsevier**. Online ISSN**:** 2352-7110 **(Indexed in Scopus/Science Citation Index Expanded) https://doi.org/10.1016/j.softx.2023.101512**

15. Juluru Anudeep, Shriram K Vasudevan and **Murugesh T S**, Machine Learning based wearable sensor module for human fall detection - A Fully Functional Solution. International Journal of Medical Engineering and Informatics, Vol.16, No.4, pp. 350-362. Inderscience. Published 09 July, 2024. ISSN Online 1755-0661. ISSN Print: 1755-0653. (Accepted April 03, 2022) (Scopus Indexed) **DOI: 10.1504/IJMEI.2022.10048147; https://doi.org/10.1504/IJMEI.2024.139887**

16. S Anbu, M Senthilkumar and **T S Murugesh**, Design of a Multiloop Controller for a Nonlinear Process. International Journal of Advanced Computer Science and Applications (IJACSA). Vol.13, No.4, pp. 290-299. 2022. ISSN: 2156-5570 (Online) ISSN: 2158-107X (Print) (Indexed in Web of Science & Scopus) **DOI: 10.14569/IJACSA.2022.0130434**

17. S.Mohanraj, **T.S.Murugesh** and E Sivaraman, A novel meta-heuristic Grey Wolf Optimization Algorithm for a coupled tank system. Journal of Data Acquisition and Processing. Vol. 38 (1), pp. 925-935. 2023. ISSN: 1004-9037 (Scopus Indexed)

18. Seshu Kumar Chegu, **T.S.Murugesh** and E Sivaraman, Grey Wolf Optimization based Controller Design for a Two Tank System. European Chemical Bulletin. Vol. 12 (Issue 7), pp.4019-4028, 2023. E-ISSN:2063-5346. **doi: 10.48047/ecb/2023.12.7.338 (Scopus Indexed)**

19. Akshay B R, Shriram Kris Vasudevan, **T.S. Murugesh** & Sini Raj Pulari. Enhancing Multiclass Classification of Knee Osteoarthritis Severity Grades Using oneDNN. International Journal of Bioinformatics Research and Applications. pp. 200 - 212, Vol. 19, No. 3, 2023. Inderscience. ISSN Online: 1744-5493. ISSN print: 1744-5485. (Scopus Indexed) **DOI: 10.1504/IJBRA.2023.10058695**

20. P.L.Arunkumar, M.Ramaswamy, **T.S.Murugesh**. IoT Based Speed Controller for an Off-Road Electric Vehicle Using ARM. International Journal of Systems Assurance Engineering and Management (IJSA), Springer Nature. Electronic ISSN: 0976-4348 Print ISSN: 0975-6809 (Accepted)

21. V Kavitha, Malaisamy K, **T S Murugesh** & M Senthilkumar. Design and Development of Jeans Textile Antenna for Wireless Broadband Applications. Journal of Industrial Textiles. Volume 53: 1-13. 2023. ISSN: 1528-0837. E-ISSN: 1530-8057. (Indexed in Scopus/Science Citation Index Expanded) **DOI: 10.1177/15280837231215374**

22. S. Jayanthi, P. Raja, M. Elangovan, **T.S. Murugesh**. Single ended 12T CNTFET SRAM Cell with high stability for low power smart device applications. e-Prime - Advances in Electrical Engineering, Electronics and Energy, 2024, 100479, ISSN 2772-6711. Elsevier. **https://doi.org/10.1016/j.prime.2024.100479**. (Scopus Indexed) (https://www.sciencedirect.com/science/article/pii/S2772671124000615)

23. Thaiyub, A., Ramakrishnan, A. B., Vasudevan, S. K., **Murugesh, T. S**., & Pulari, S. R. (2024). Predictive Modelling for Employee Retention: A Three-Tier Machine Learning Approach With oneAPI. In Multidisciplinary Applications of AI Robotics and Autonomous Systems (pp. 195-205). IGI Global. **https://doi.org/10.4018/979-8-3693-5767-5.ch013** ISBN13: 9798369357675 ISBN13Softcover: 9798369357682, EISBN13: 9798369357699

24. **Murugesh, T.S**., Vasudevan, S.K., Pulari, S.R., Dantu, N.V. (2024). oneAPI-Based Design and Development of an Advanced Driver Assistance and Monitoring System Utilizing Embedded Machine Vision Technology. Lecture Notes in Networks and Systems, Vol. 1043. pp. 409–426, 2024. Springer, Singapore. Print ISBN: 978-981-97-4227-1, Online ISBN: 978-981-97-4228-8. **https://doi.org/10.1007/978-981-97-4228-8_28**

25. Nishank Satish, Manikanta Bukapindi, K. Shreyas, Guru Akhil, Vineel Akash, Shriram K. Vasudevan & **T. S. Murugesh**. Optimizing Traffic Management Through Density-Driven Dynamic Traffic Signaling and Emergency Vehicle Prioritization Using Audio and Video. Lecture Notes in Networks and Systems, Vol. 1038, pp. 347–366, 2024. Springer, Singapore. Print ISBN: 978-981-97-4148-9, Online ISBN: 978-981-97-4149-6. **https://doi.org/10.1007/978-981-97-4149-6_25**.

### ***ii. National Referred Journals***

1. **T.S.Murugesh**, Implication of Synchronization in Coupled Cardiac Cell Array, pp. 140-152, in the Proceedings of National Conference on Process Automation, Control and Computing (NCPACC) A Department of Science and Technology - Promotion of University Research and Scientific Excellence (DST-PURSE) sponsored conference, 2018. ISBN 978-93-87862-36-4.

### ***iii. International Conferences***

1. S.Mohanraj, **T.S.Murugesh**, J.Krishnan and R.Malathi, Synchronization of Cardiac Oscillators - A study based on Gap Junction Conductance in Rabbit SA Node Cell, International Conference on "Biomaterials, Implant Devices and Tissue Engineering (BIDTE 2012) 6-8 January 2012." , Organized by Rajalakshmi Engineering College Chennai, Society for Biomaterials and Artificial Organs (India), STERMI, India.

2. **T.S.Murugesh**, Ranjan Piyush, J.Krishnan and R.Malathi, Synchronization of Cardiac Oscillators, 3rd International Conference on Bioinformatics and Systems Biology (INCOBS 2012) 16th-18th February 2012, Sponsored by Department of Biotechnology, DRDO, CSIR, ICMR, Organized by Department of Bioinformatics, Annamalai University, India.

3. Nishank Satish, Manikanta Bukapindi, Shreyas K, Guru Akhil, Vineel Akash, Shriram Vasudevan & **T S Murugesh**. Optimizing Traffic Management Through Density-Driven Dynamic Traffic Signaling and Emergency Vehicle Prioritization Using Audio and Video in the 7th International Conference on Innovative Computing and Communication (ICICC-2024), organized by Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi, India in association with the National Institute of Technology Patna, India and the University of Valladolid, Spain on 16th -17th February 2024. **Springer**.

4. **Murugesh T S**, Shriram K Vasudevan, Sini Raj Pulari & Nitin Vamsi Dantu. oneAPI based Design and Development of an Advanced Driver Assistance and Monitoring System utilizing Embedded Machine Vision Technology in the 7th International Conference on Innovative Computing and Communication (ICICC-2024), organized by Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi, India in association with the National Institute of Technology Patna, India and the University of Valladolid, Spain on 16th -17th February 2024. **Springer**.

## ***iv. National Conferences***

1. R.Narmatha, **T.S.Murugesh** and J.Krishnan, Design of an Intelligent Control Scheme for Synchronizing Two Van Der Pol Oscillators, National conference on "Challenges in Biochemical Engineering and Biotechnology for Sustainable Environment" (CBSE2014), 2nd and 3rd April, 2014, Organized by the Department of Chemical Engineering, Annamalai University, Annamalai Nagar, Tamilnadu, India. 608002.

2. **T.S.Murugesh**, Implication of Synchronization in Coupled Cardiac Cell Array, Proceedings of National Conference on Process Automation, Control and Computing (NCPACC 2018) A **DST-PURSE** sponsored conference, Nov 9-10, 2018, Department of Electronics and Instrumentation Engineering, Annamalai University, pp. 140-152. Annamalai University, Annamalai Nagar, Bonfring, Coimbatore.

3. **T S Murugesh**, M Senthilkumar and S Anbu, Analyzing Coupling Efficacies in Synchronization of Coupled Van Der Pol Oscillators, in the **SERB - DST** Sponsored National Symposium on "Impending Mathematical Techniques for Nonlinear PDEs in Collective Dynamics", during 24.01.2023 & 25.01.2023. Organized by the Department of Mathematics (SF) & Mathematics with Computer Applications, PSG College of Arts & Science, Coimbatore, Tamil Nadu, India.

## ***v. Poster Presentations***

1. **T.S.Murugesh**, J.Krishnan and R.Malathi, Certain Investigations on the Synchronization issues in Cardiac Oscillators. Indo-Japan Symposium on Advances in Biomedicine and Bioinformatics, jointly organized by Indian Institute of Technology, Delhi and National Institute of Advanced Industrial Science and Technology, Japan on February 23, 2015 **@IIT Delhi**.

2. Krishnan J, **Murugesh T S** and Malathi R, Neural Influence on Synchronization of Cardiac Oscillators – A Computational Study, New Biological Frontiers Illuminated by Molecular Sensors and Actuators, June 28 – July 1, 2015, Biophysical Society Thematic Meeting, GIS Convention Center at **National Taiwan University, Taipei, Taiwan**.

## ***vi. Book Chapters***

1. Vasudevan, S. K., **Murugesh, T. S**., Narassima, M. S., Dantu, N. V., Pulari, S., & Muralidharan, S. (2023). A Deep Learning Approach for the Sales Prediction in Retail Stores: An End-to-End Analysis and Implementation. In Internet of Everything for Smart City and Smart Healthcare Applications (pp. 17-34). Signals and Communication Technology book series. Cham: **Springer Nature** Switzerland. Electronic ISSN:1860-4870, Print ISSN:1860-4862. **https://doi.org/10.1007/978-3-031-34601-9_2**

2. Shriram Kris Vasudevan, **T.S. Murugesh**, Nitin Vamsi Dantu and Sini Raj Pulari, AI based real time Melanoma skin cancer detection to aid clinical decision making. **Wiley**

Book Chapter: NGSWS 2023 (AI for Next Generation Smart Wearable Systems: Trends and Applications). (Accepted)

3. Shriram Kris Vasudevan, **T.S. Murugesh**, Sini Raj Pulari, Nitin Vamsi Dantu, and Sunandhini Muralidharan. Smart Multi-Layer Architecture for Cyber-Physical Agricultural Systems with Intel oneAPI. Elsevier Book Chapter: ACPS2022 Agri 4.0 and the Future of Cyber-Physical Agricultural Systems. pp. 115-133. 1st Edition - March 1, 2024. Paperback ISBN: 9780443131851; eBook ISBN: 9780443131868. **https://doi.org/10.1016/B978-0-443-13185-1.00007-1**

4. Sini Raj Pulari, **T S Murugesh**, Shriram K Vasudevan & Akshay Bhuvaneswari Ramakrishnan. Reinforcement learning for demand forecasting and customized services. Wiley-Scrivener Publishing Book Chapter: Cognitive Analytics and Reinforcement Learning: Theories, Techniques and Applications. pp. 123 - 134, 2024. (Scopus Indexed) ISBN: 978-1-394-21404-4. April 2024. **https://doi.org/10.1002/9781394214068.ch6**

5. Akshay Bhuvaneswari Ramakrishnan, T S Murugesh, Sini Raj Pulari & Shriram K Vasudevan. Cognitive Analytics-Based Diagnostic Solutions in Healthcare Infrastructure. Cognitive computing Applications in smart cities. **Wiley-Scrivener Publishing** Book Chapter: Cognitive Analytics and Reinforcement Learning: Theories, Techniques and Applications. pp. 239 - 252, 2024. **(Scopus Indexed) https://doi.org/10.1002/9781394214068.ch13**

6. Akshay Bhuvaneswari Ramakrishnan, **T.S. Murugesh**, Sini Raj Pulari, Shriram K. Vasudevan, Arun G.K., Chapter 5 - Energy efficiency and conservation using machine learning, Editor(s): V. Indragandhi, R. Elakkiya, V. Subramaniyaswamy, In Advances in Intelligent Energy Systems, Green Machine Learning and Big Data for Smart Grids, Elsevier, 2025, Pages 69-78, ISBN 9780443289514, **https://doi.org/10.1016/B978-0-443-28951-4.00006-X**

## ***vii. Books Published @ International level with ISBN Number***

1. Juluru Anudeep, Shriram K Vasudevan and **T S Murugesh**, Let's Get IoT-*fied*! 30 IoT Projects for All Levels. 2022. CRC Press, Taylor & Francis Group (U.K). **ISBN** # **9780367706067. https://doi.org/10.1201/9781003147169**

2. Juluru Anudeep, Shriram K Vasudevan and **T. S. Murugesh**, Let's Get IoT-*fied*! 30 IoT Projects for All Levels. 2022. CRC Press, Taylor & Francis Group (U.K). **ISBN** # **9780367706074**. **https://doi.org/10.1201/9781003147169-1**

3. A Baskar, R. Muthaiah, Shriram K Vasudevan and **T S Murugesh**, *Digital Image Processing*, 2023. CRC Press, Taylor & Francis Group (U.K). **ISBN** # 9781032108575 **DOI:** 10.1201/9781003217428 eBook **ISBN: 9781003217428 DOI: 10.1201/9781003217428**

4. Shriram K Vasudevan, Nitin Vamsi Dantu, Sini Raj Pulari and **T. S. Murugesh** *Machine Learning with oneAPI*. 2023. CRC Press, Taylor & Francis Group (U.K). CRC Press. **ISBN # 9781032493107**. DOI: **10.1201/9781003393122**

5. Shriram K Vasudevan, Nitin Vamsi Dantu, Sini Raj Pulari and **T. S. Murugesh** *Machine Learning with oneAPI*. 2023. CRC Press, Taylor & Francis Group (U.K). CRC Press. **ISBN # 9781032493114. DOI: 10.1201/9781003393122**

6. Akshay Ramachandran, Sini Raj Pulari, **T S Murugesh** and Shriram K Vasudevan. *Machine Learning: A Comprehensive Beginner's Guide.* 2024. **CRC Press, Taylor & Francis Group (U.K).** CRC Press. (July 15, 2024) **ISBN # 9781032676661 DOI: 10.1201/9781032676685**

7. Akshay Ramachandran, Sini Raj Pulari, **T S Murugesh** and Shriram K Vasudevan. *Machine Learning: A Comprehensive Beginner's Guide.* 2024. **CRC Press, Taylor & Francis Group (U.K).** CRC Press. (July 15, 2024) **ISBN # 9781032676654 DOI: 10.1201/978103267668**

8. **T.S.Murugesh**, Shriram K Vasudevan and Sini Raj Pulari. Python – A practical learning approach. 2024. **CRC Press**, **Taylor & Francis Group (U.K).** CRC Press. (August 7, 2024), **ISBN # 9781032712666**. **DOI: 10.1201/9781032712673**

9. **T.S.Murugesh**, Shriram K Vasudevan and Sini Raj Pulari. Python – A practical learning approach. 2024. **CRC Press, Taylor & Francis Group (U.K).** CRC Press. (August 7, 2024), **ISBN # 9781032712642**. **DOI: 10.1201/9781032712673**

10. **T. S. Murugesh** and Dr. Shriram K Vasudevan, *An Insight to Biomedical* Engineering - Making the Difference. 2023. Nova Science Publishers, Inc., a New York corporation located at 415 Oser Avenue, Suite N, Hauppauge, NY 11788-3619, USA. (Formal Contract Agreement Signed - Book ID 23889)

11. Shriram K Vasudevan, Sini Raj Pulari and **T. S. Murugesh**. *Cyber Security in Banking. 2025.* **The Institution of Engineering and Technology (IET) Academic Books**. Savoy Place, London WC2R 0BL, UK. (Author Agreement Signed)

## 16. Conferences/Workshops/Seminar/ Short Term Refresher Courses Attended (Proof Enclosed)

| S.No | Name of the Programme Attended | Duration | Organized by |
|---|---|---|---|
| 1. | UGC Sponsored "Orientation Course" | 01st - 28th June 2002 | UGC - Academic Staff College, Bharathiar University, Coimbatore. 641 046 |
| 2. | One day workshop on "Electronic Circuit Design and Simulation" | April 10, 2004 | Department of Electrical Engineering, Faculty of Engineering and Technology, Annamalai University, AMDL, Bangalore and Vi Microsystems, Chennai. |
| 3. | Nanoscience & Nanotechnology | One Week, 06th - 10th | Applied Science Department, National Institute of Technical |

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| | | November 2006 | Teachers Training & Research (NITTTR), Chandigarh, Ministry of Human Resource Development, Government of India. |
| 4. | Digital Signal Processing | One Week, 21st - 25th May 2007 | Computer Science Department, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, Ministry of Human Resource Development, Government of India. |
| 5. | AICTE Sponsored STTP on "Design and Simulation in Control Systems Engineering" | 15 days, 01st - 15th June 2007 | Department of Electronics and Instrumentation Engineering, Pondicherry Engineering College, Puducherry |
| 6. | MATLAB | One Week, 19th - 23rd November 2007 | Electrical Engineering Department, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, Ministry of Human Resource Development, Government of India. |
| 7. | UGC Sponsored National Workshop on "Programming Approach and Industrial Applications on PLC (PAIA'10)" | 2 days, 15-16 March 2010 | Department of Electronics and Instrumentation Engineering, Faculty of Engineering and Technology, Annamalai University. |
| 8. | AICTE Sponsored Staff Development Programme on "Computational Biology" | 2 Weeks, 21st Nov - 03rd Dec 2011 | Department of Electronics and Instrumentation Engineering, Annamalai University. |
| 9. | CSIR (Council of Scientific and Industrial Research) Sponsored ISTE - STTP on "Industrial Pollution - Advanced Technologies in Control and Safety (IPATICS 2013)" | One Week, 10th - 14th June 2013 | Department of Chemical Engineering, Annamalai University. |
| 10. | International Workshop on Emerging Trends in Energy Systems Management (IWETESM-2014) | 3 days, 14th – 16th March 2014 | Faculty of Engineering and Technology, Annamalai University and Center for Energy Systems Research, Tennessee Technological University, USA |
| 11. | One day Training Programme on "Preparation of Research Project | 14th March 2016 | Staff Training and Development Centre & Department of |

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| | Proposal" | | Botany, Annamalai University, Tamil Nadu |
| 12. | 2 days hands-on IoT Boot Camp | 17th & 18th December 2016 | Vmoksha Technologies Pvt. Ltd, Bangalore. 560 102. |
| 13. | HANDS ON PRACTICES IN Lab VIEW | One Week, 20th - 24th November 2017 | Electrical Engineering Department, National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh, Ministry of Human Resource Development, Government of India. |
| 14. | National workshop on "Emerging Challenges in the Operation and Control of Solar Power Plants (ECOCSPP'18)" | March 24th & 25th, 2018 | Centre for Renewable Energy, Faculty of Engineering and Technology, Annamalai University |
| 15. | Recent Advances in Signal Processing, RF & Wireless Communication | 23rd - 27th September 2019 | AICTE (All India Council for Technical Education) Training And Learning (ATAL) Academy at Government College of Engineering, Srirangam, Trichy. |
| 16. | Cyber Security | 21st - 25th October 2019 | Department of Computer Science and Engineering, Government College of Engineering Srirangam, Trichy sponsored by AICTE (All India Council for Technical Education) Training And Learning (ATAL) Academy |
| 17. | Internet of Things (IoT) | 04th - 08th November 2019 | AICTE (All India Council for Technical Education) Training And Learning (ATAL) Academy at Government College of Engineering, Srirangam, Trichy. |
| 18. | Robotics | 25th - 29th November 2019 | AICTE (All India Council for Technical Education) Training And Learning (ATAL) Academy at Government College of Engineering, Srirangam, Trichy. |
| 19. | TEQIP-III Sponsored Two day Faculty Development Programme on "Design, Develop and Deliver | 2 days, 23rd & 24th April, 2020. | Department of Technical Education, State Project Implementation Unit – Tamil |

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| | online courses through MOODLE platform". | | Nadu & Coimbatore Institute of Technology, Coimbatore. |
| 20. | One Week AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)". | 11th - 15th May 2020 | AICTE (All India Council for Technical Education) Training And Learning (ATAL) Academy at Government College of Engineering, Srirangam, Trichy. |
| 21. | One Week Faculty Development Programme (FDP) on "Yoga at Home and Yoga with Family". | One Week, 15th - 21st June 2020 | Department of Physical Education in association with National Service Scheme, Dr. M.G.R. Educational and Research Institute, Chennai. |
| 22 | TEQIP-III Sponsored Faculty Development Programme under twinning activity with NIT, Arunachal Pradesh and GEC, Jabalpur on "AI – The World of Prediction Machines". | One Week, 24th - 30th June 2020 | Department of Electronics and Instrumentation Engineering, Government College of Technology, Coimbatore. |
| 23. | One week Faculty Development Programme titled "A Hands on Practice of Software Tools in Mechanical Engineering". | 29th June - 04th July 2020 | Department of Mechanical Engineering, Vaageswari College of Engineering, Karimnagar, Telangana. |
| 24. | Tamil Nadu State Council for Higher Education, Chennai – 05 sponsored Two days State Level Online Faculty Development Programme (FDP) on "Virtual Teaching and Learning". | June 30th to July 01st 2020. | Directorate of Technical Education, Guindy, Chennai – 25 & Government Polytechnic College – Srirangam, Sethurappatti, Trichy. |
| 25. | A Technical webinar on "Product Lifecycle Management" | 27th July 2020 | Department of Mechanical Engineering, SCAD College of Engineering and Technology, Tirunelveli. |
| 26. | National Level Social Awareness Programme on "Yoga and Natural Way of Living". | 02nd August 2020 | University College of Engineering, BIT Campus, Anna University, Tiruchirappalli in association with Rotaract Club of Anna University, Tiruchirappalli. |
| 27. | AICTE-ISTE sponsored one week Online Faculty Development Programme on "Internet of Things (IoT) and its Applications". | One Week, 16th - 22nd November 2020 | Department of Computer Science and Engineering, Faculty of Engineering and Technology, Annamalai University, Annamalainagar, Tamil Nadu. |

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| 28. | AICTE sponsored one week STTP on "Modeling and Simulation of Industrial Processes (MOSCHEM 2021)" | One Week, 20th - 25th September 2021 | Department of Chemical Engineering, Faculty of Engineering & Technology, Annamalai University, Annamalainagar, Tamil Nadu. |
| 29. | AICTE sponsored one week STTP on "Optimization Modelling and Simulation for Process Industries (MOSCHEM III – 2021)" | One Week, 04th - 09th October 2021 | Department of Chemical Engineering, Faculty of Engineering & Technology, Annamalai University, Annamalainagar, Tamil Nadu. |
| 30. | **SERB - DST** Sponsored National Symposium on "Impending Mathematical Techniques for Nonlinear PDEs in Collective Dynamics" | 2 days, 24.01.2023 & 25.01.2023 | Department of Mathematics (SF) & Mathematics with Computer Applications, PSG College of Arts & Science, Coimbatore, Tamil Nadu, India. |
| 31. | Innovate TN, StartupTN Sponsored One week Capacity Building Program – Innovation Mentor | 05/08/2024 To 09/08/2024 | Government College of Engineering Srirangam, Trichy |
| 32. | Advancements and Applications in 3D printing and Additive manufacturing | 02/12/2024 To 07/12/2024 | AICTE Training And Learning (ATAL) Academy Faculty Development Program at Government College of Engineering, Srirangam |

## *17. List of Conferences/Workshops/Seminar/Short Term Refresher Courses/ Faculty Development Programme Organized in sequential order*

| S. No. | Name of the Programme Organized | Nature of the Programme | Venue | Period |
|---|---|---|---|---|
| 1. | "cRIO for Renewable Energy Applications" | National Level Workshop | Centre for Renewable Energy, Faculty of Engineering & Technology, Annamalai University jointly with National Instruments, Bengaluru | 2nd and 3rd December 2017 |
| 2. | Trends and Issues in Control System Analysis and Design | One Week Online **(**All India Council for Technical Education**)** AICTE Training And Learning (ATAL) Academy Programme (in Control Systems & Sensors Technology) | Online mode | 17th to 21st August 2020 |

### *18. i. INVITED TALKS DELIVERED AT INTERNATIONAL LEVEL*

| S. No. | Topic of the Oral Presentation | Name of the Programme | Organized by | Date |
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| 1. | Design of a smart wearable for human fall detection | Scopus Indexed "3rd Edition of International Conference on Materials Science and Engineering (MAT 2022)" (online conference) | Magnus Group LLC, 150 South Wacker Drive #2400, Chicago, Illinois. 60606, USA, 2022 | September 21 - 22, 2022 |
| 2. | Design of a wearable for suppression of hand tremors | Scopus Indexed "3rd Edition of International Conference on Materials Science and Engineering (MAT 2022)" (online conference) | Magnus Group LLC, 150 South Wacker Drive #2400, Chicago, Illinois. 60606, USA, 2022 | September 21 - 22, 2022 |
| 3. | Building a Smart Ventilator! | 5th Virtual Congress on Materials Science and Engineering, "Materials Info 2022" | Mind Authors, Inc. 9450 SW Gemini Dr, Suite 71868, Beaverton, Oregon 97008 USA | September 26 - 29, 2022 |
| 4. | AI based skin cancer detection to aid clinical decision making | 5th Virtual Congress on Materials Science and Engineering, "Materials Info 2022" | Mind Authors, Inc. 9450 SW Gemini Dr, Suite 71868, Beaverton, Oregon 97008 USA | September 26 - 29, 2022 |

### *ii. INVITED TALKS DELIVERED AT NATIONAL LEVEL*

| S. No. | Topic of the Presentation | Name of the Programme | Organized by | Date |
|---|---|---|---|---|
| 1. | Programming in MATLAB for Computational Modeling | National Level Technical Symposium | Department of Electronics and Communication Engineering, Madurai Institute of Engineering & Technology, Sivagangai (Dt) | 19th December 2015 |
| 2. | Controllers for Engineering Applications | ISTE (Indian Society for Technical Education), Students Chapter | Srinivasa Ramanujan Center, SASTRA University, Kumbakonam. | 28th March 2016 |
| 3. | Design of Nonlinear Controllers and Nonlinear Controllers in MATLAB | ISTE Approved Short Term Training Programme on "Advances in MATLAB for Engineering | Department of Electrical Engineering, Faculty of Engineering and Technology, Annamalai University | 07th June 2016 |

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| | | Applications (AMEA 2016)" | | |
| 4. | Oscillator Model in MATLAB | ISTE Approved Short Term Training Programme on "Advances in MATLAB for Engineering Applications (AMEA 2016)" | Department of Electrical Engineering, Faculty of Engineering and Technology, Annamalai University | 08th June 2016 |
| 5. | Optimization Techniques for MPPT in Solar Energy System | National Level Workshop on "Embedded Controllers for Solar Energy System" | Manakula Vinayagar Institute of Technology, Puducherry jointly with Centre for Renewable Energy, Faculty of Engineering and Technology, Annamalai University | 15th September 2018 |
| 6. | Control Systems in Robotics | AICTE sponsored One week ATAL Faculty Development Programme on "Industrial Robotics and Automation" | Department of Mechanical Engineering, Government College of Engineering Srirangam, Sethurappatti, Tiruchirappalli. 620 012. Tamil Nadu | 26th November 2019 |
| 7. | Dissemination of information on National Education Policy (NEP) 2020 | One Day National Level ONLINE Webinar conducted on behalf of "Unnat Bharat Abhiyan (UBA)" | Government College of Engineering Srirangam, Sethurappatti, Tiruchirappalli on behalf of "Unnat Bharat Abhiyan (UBA)" a flagship program of Ministry of Education (Previously MHRD - Ministry of Human Resource Development), Government of India | September 23, 2020 |
| 8. | AI in Bio Control Systems | Tamil Nadu State Government Sponsored Five Day Online Faculty Development Programme on "Artificial Intelligence - Applications" | Faculty Training Centre, Government College of Technology, Coimbatore 641 013, in association with Government College of Engineering, Thanjavur, 613 402. Tamil Nadu | February 16, 2021 |
| 9. | Artificial Intelligence in Health Care | Tamil Nadu State Government Sponsored Five Day Online Faculty | Faculty Training Centre, Government College of Technology, Coimbatore 641 013, in association with | July 06, 2022 |

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| | | Development Programme on "Emerging Biomedical Technologies for Smarter Healthcare Applications" | Government College of Engineering, Salem, 636 011. Tamil Nadu | |
| 10. | Design of a Smart Healthcare System | Tamil Nadu State Government Sponsored Five Day Online Faculty Development Programme on "Emerging Biomedical Technologies for Smarter Healthcare Applications" | Faculty Training Centre, Government College of Technology, Coimbatore 641 013, in association with Government College of Engineering, Salem, 636 011. Tamil Nadu | July 06, 2022 |
| 11. | AI, Machine Learning, Data Analytics | CSIR Sponsored, Two Day National Seminar on "Advancements in IIoT (lndustrial Internet of Things) for Engineering Applications" | Department of Computer Science and Engineering on 04.08.2022 at P.A. College of Engineering and Technology, Pollachi, 642 002, Tamil Nadu | August 04, 2022 |
| 12. | IoT Healthcare and Cloud Computing Integration | CSIR Sponsored, Two Day National Seminar on "Advancements in IIoT (lndustrial Internet of Things) for Engineering Applications" | Department of Computer Science and Engineering on 04.08.2022 at P.A. College of Engineering and Technology, Pollachi, 642 002, Tamil Nadu | August 04, 2022 |
| 13. | Data Analytics to aid Decision Making | Faculty Development Programme sponsored by APJ Abdul Kalam Technological University Trivandrum, Kerala on "Data Analytics for Decision Making" | Department of Mechanical Engineering, VISWAJYOTHI College of Engineering and Technology, Vazhakulam P.O, Muvattupuzha, Ernakulam Dist. 686 670, Kerala | March 02, 2023 |
| 14. | Data Analytics in Health Care | Faculty Development Programme sponsored by APJ | Department of Mechanical Engineering, VISWAJYOTHI College of Engineering and | March 02, 2023 |

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| | | Abdul Kalam Technological University Trivandrum, Kerala on "Data Analytics for Decision Making" | Technology, Vazhakulam P.O, Muvattupuzha, Ernakulam Dist. 686 670, Kerala. | |
| 15. | Investigations on a dual supply based Highly Stable and Low Power 6T CNTFET SRAM Cell | International Hybrid Conference on Nano Structured Materials and Polymers (ICNP 2023) | Mahatma Gandhi University, Kottayam, Kerala, India. | 12-14 May, 2023 |
| 16. | Sensors for Automobiles, Factors influencing selection of sensors, Microcontrollers for Automobiles | TiHAN (Technology Innovation Hub on Autonomous Navigation) IIT Hyderabad Sponsored Five Day National Level Workshop" on "Advanced Driving Assistance, Monitoring Systems with Hands-on Training" | National Institute of Technology, Tiruchirappalli, 620 015 @ NIT Trichy | 08th June 2023 |
| 17. | Hands-on: Collision warning, Forward departure alert | TiHAN (Technology Innovation Hub on Autonomous Navigation) IIT Hyderabad Sponsored Five Day National Level Workshop" on "Advanced Driving Assistance, Monitoring Systems with Hands-on Training" | National Institute of Technology, Tiruchirappalli, 620 015 @ NIT Trichy | 08th June 2023 |
| 18. | Introduction to IoT and Embedded Processors for IoT | Five Day FDP on "Embedded Systems and IoT with Hands-on Training in Arduino and Raspberry Pi" | Saranathan College of Engineering, Venkateswara Nagar, Trichy - Madurai Highway, Panjappur, Tiruchirappalli, Tamil Nadu 620012 | 24th July 2023 |
| 19. | Case Studies of IoT | Five Day FDP on "Embedded Systems and IoT with Hands-on Training in | Saranathan College of Engineering, Venkateswara Nagar, Trichy - Madurai Highway, Panjappur, | 25th July 2023 |

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| | | Arduino and Raspberry Pi" | Tiruchirappalli, Tamil Nadu 620012 | |
| 20. | Anna University B.E Curriculum, Syllabus and CBCS | 2 week AICTE Student Induction Training Programme (11-09-2023 to 24-09-2023) | Government College of Engineering Srirangam, Sethurappatti, Tiruchirappalli. Tamil Nadu. 620 012 | 21st September 2023 |
| 21. | Hackathons - An insight | Association Inaugural Ceremony, Association of COmmunicative ELectronics (ACOEL) | Department of Electronics and Communication Engineering, M.A.M. College of Engineering, Siruganur, Trichy. 621 105. Tamil Nadu | 04th October 2023 |
| 22. | Brain Storming Basics of IoT, IoT Technology Stack, IoT - Day to Day - How IoT Helps? | *CII-TNTDPC Certificate Course on Internet of Things (IoT)* from 9th to 20th October 2023 | Confederation of Indian Industry (CII) - Tamil Nadu Technology Development & Promotion Centre (TNTDPC) | 09th October 2023 |
| 23. | Power Amplifiers & Multivibrators - Industry Perspective | Department of Electronics & Communication Engineering Jointly with IEEE Student Branch (STB10084) | K.Ramakrishnan College of Technology, Kariyamanikam Road, Samayapuram, Tiruchirappalli. Tamil Nadu. 621 112. | 07th May 2024 |
| 24. | Artificial Intelligence in Health care | AICTE Training And Learning (ATAL) Academy sponsored FDP titled “Exploring the impact of Artificial Intelligence on healthcare from 02/09/2024 to 07/09/2024 | Nehru Institute of Technology, Kaliyapuram, Coimbatore, Tamil Nadu. 641 105 | 06th September 2024 |
| 25. | AI in Health care - Challenges, Benefits & Risks | AICTE Training And Learning (ATAL) Academy sponsored FDP titled “Exploring the impact of Artificial Intelligence on healthcare from 02/09/2024 to 07/09/2024 | Nehru Institute of Technology, Kaliyapuram, Coimbatore, Tamil Nadu. 641 105 | 06th September 2024 |
| 26. | Anna University B.E Curriculum, Syllabus and | 2 week AICTE Student Induction Training Programme | Government College of Engineering Srirangam, Sethurappatti, Tiruchirappalli. | 12th September 2024 |

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| | CBCS | (04-09-2024 to 17-09-2024) | Tamil Nadu. 620 012 | |
| 27. | Robotics – An insight | 2 days Technical Event on Industrial Automation & Robotics held from 28-11-2024 to 29-11-2024 | Jointly organized by District Administration, Virudhunagar & Sri Vidya College of Engineering & Technology, Virudhunagar. 626 005. Tamil Nadu | 28th November 2024 |
| 28. | Introduction to Automation | 2 days Technical Event on Industrial Automation & Robotics held from 28-11-2024 to 29-11-2024 | Jointly organized by District Administration, Virudhunagar & Sri Vidya College of Engineering & Technology, Virudhunagar. 626 005. Tamil Nadu | 28th November 2024 |
| 29. | Unsupervised Learning and Clustering in Healthcare | 2 weeks AICTE Training And Learning (ATAL) Advance Faculty Development Programme titled "Advancing Healthcare and Med-Tech through Machine Learning: From Theory to Practice" held from 03rd February to 15th February 2025 | Department of Computer Science & Engineering and Artificial Intelligence, Kongu Engineering College, Perundurai, 638 060. Erode. Tamil Nadu | February 04, 2025 |
| 30. | ML based Skin Cancer Detection in Advancing Healthcare and Med-Tech | 2 weeks AICTE Training And Learning (ATAL) Advance Faculty Development Programme titled "Advancing Healthcare and Med-Tech through Machine Learning: From Theory to Practice" held from 03rd February to 15th February 2025 | Department of Computer Science & Engineering and Artificial Intelligence, Kongu Engineering College, Perundurai, 638 060. Erode. Tamil Nadu | February 04, 2025 |
| 31. | Supervised Learning Methods in Healthcare | 2 weeks AICTE Training And Learning (ATAL) Advance Faculty | Department of Computer Science & Engineering and Artificial Intelligence, Kongu Engineering College, | February 06, 2025 |

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| | | Development Programme titled "Advancing Healthcare and Med-Tech through Machine Learning: From Theory to Practice" held from 03rd February to 15th February 2025 | Perundurai, 638 060. Erode. Tamil Nadu | |
| 32. | ML in Advancing HEALTH CARE - Design of a wearable for suppression of Hand Tremors | 2 weeks AICTE Training And Learning (ATAL) Advance Faculty Development Programme titled "Advancing Healthcare and Med-Tech through Machine Learning: From Theory to Practice" held from 03rd February to 15th February 2025 | Department of Computer Science & Engineering and Artificial Intelligence, Kongu Engineering College, Perundurai, 638 060. Erode. Tamil Nadu | February 06, 2025 |

***iii. OTHER NOTABLE CONTRIBUTIONS***

1. Appointed and Served as **NTA** (National Testing Agency) **Representative** for the Conduct of **NEET** (National Eligibility Cum Entrance Test) (UG)-2019 exam during May, 2019; Place of Duty: Cuddalore. Tamil Nadu.
2. Acted as **Primary Evaluator** for the Government of India's **Toycathon 2021** an inter-ministerial initiative organized by Ministry of Education's Innovation Cell with support from All India Council for Technical Education during January - February 2021.
3. Appointed and Served as the **Team Head, Additional Static Surveillance Team I** for Election Expenditure Monitoring for the General Elections to Tamil Nadu Legislative Assembly 2021, during March - April 2021.
4. Served as a **Judge** in the Grand Finale for the Government of India's **Toycathon 2021** an inter-ministerial initiative organized by Ministry of Education's Innovation Cell with support from All India Council for Technical Education conducted during June 2021.
5. Appointed as the College Single Point of Contact (**College SPOC**) for Smart India Hackathon 2022 (**SIH2022**) organized by Government of India's Ministry of Education's Innovation Cell (MIC) and the All India Council for Technical Education (AICTE).
6. Acted as **Primary Evaluator** for the Government of India's **Smart India Hackathon 2022** (Software & Hardware Edition) an inter-ministerial initiative organized by Ministry of Education's Innovation Cell with support from All India Council for Technical Education during April - June 2022.

7. **Faculty Evaluator** for "Professional Readiness for Innovation, Employability and Entrepreneurship" project-based experiential learning program (**Naalaiya Thiran**), Under the **Naan Mudalvan** Initiative by the Government of Tamil Nadu, with Anna University as the University Ecosystem Partner, IBM as the Technology Partner, ICT Academy as the Support Partner, and NASSCOM as the Skills Certification Partner at the Department level.
8. Nominated as the College Single Point of Contact (**College SPOC**) for the **TCS-iON Digital Learning Programme**, in *IoT and its applications using Raspberry Pi*, as a part of the **TNSDC** (Tamil Nadu Skill Development Corporation) Naan Mudhalvan Program, an initiative by the Government of Tamil Nadu.
9. Acted as the **Chairman** for Zone XVIII, Phase II, **Anna University Central Valuation** during April / May 2022 Semester Examinations.
10. Appreciated by **Huawei** for the academic collaboration and was issued Huawei developers certification.
11. **Certified Mentor Registration No: 7488985509.** Successfully completed the Mentor Orientation Training Programme, under "National initiative for Technical Teachers Training", Conducted by All India Council for Technical Education (AICTE), New Delhi & National Institute of Technical Teachers Training and Research, Chennai from August 22 to 26, 2022.
12. **Mentored** the "SHORTLISTED" teams, for the Grand Finale of Smart India Hackathon 2022 conducted on August 25th and 26th, 2022.
13. **Certified** Microsoft Educator Academy Professional, 2022.
14. **Reviewer** of Technical Books in Regional Language scheme of **AICTE** for 2nd Year B.E / B.Tech courses coordinated by the Centre for Development of Tamil in Engineering and Technology, Anna University, Chennai - 600 025.
15. **Master Assessor** for the Naan Mudalvan Program devised by the Government of Tamil Nadu, 2023.
16. **Chairperson** for a Plenary Session in the International Hybrid Conference on Nano Structured Materials and Polymers (ICNP 2023) at Mahatma Gandhi University, Kottayam, Kerala, India, 2023.
17. **Evaluator** for "**The Kavach2023"** Cybersecurity Hackathon, organized by the Ministry of Home Affairs (MHA) in collaboration with the Ministry of Education's (MoE) Innovation Cell, AICTE along with Bureau of Police Research and Development (BPR&D) and Indian Cybercrime Coordination Centre (I4C) (MHA), Government of India.
18. **Chief Superintendent** for the April/May 2023 Anna University Theory Examinations.
19. **Exam Cell Coordinator** at GCE Srirangam from May 2023.
20. **Mentor** for the academic year 2023-2024 in MIT Art, Design and Technology University, Rajbaug, Loni Kalbhor, Pune, India – 412 201.
21. **Jury/Evaluator** for the Internal Hackathon held on behalf of "Smart India Hackathon 2023" conducted at Anna University, Regional Campus, Madurai. 625 019.
22. **Jury** for the Project Expo, 2023 at Indra Ganesan College of Engineering, Manikandam, Tiruchirappalli. 620 012. Tamil Nadu.
23. Appointed as the College Single Point of Contact (**College SPOC**) for **Smart India Hackathon 2023** organized by Government of India's Ministry of Education's Innovation Cell (MIC) and the All India Council for Technical Education (AICTE).

24. Chief Guest for the Association Inaugural Ceremony, Association of Communicative Electronics (ACOEL), Department of ECE, October 4, 2023, M.A.M. College of Engineering, Siruganur, Trichy. 621 105. Tamil Nadu.
25. **Chief Superintendent** for the November/December 2023 Anna University Theory Examinations.
26. **Jury** for the pitching sessions in the Grand Finale of Intel Daksh AI Hackathon in collaboration with SASTRA University focusing GenAI, 600+ Participants, 120 teams on the 10th of March 2024 at SASTRA University, Thanjavur. Tamil Nadu. India.
27. **Approved Mentor** under the MentorTN, Tamilnadu Startup and Innovation Mission, branded as StartupTN mentorship, Nodal Agency of the Government of Tamil Nadu for Innovation and Startups in the State.
28. **Chief Superintendent** for the April/May 2024 Anna University Theory Examinations.
29. Appointed as the College Single Point of Contact (**College SPOC**) for **Smart India Hackathon 2024** organized by Government of India's Ministry of Education's Innovation Cell (MIC) and the All India Council for Technical Education (AICTE).
30. **Chief Superintendent** for the November/December 2024 Anna University Theory Examinations.
31. **Session Chair** at the International Conference on Technology Enabled Economic Changes (InTech 2025), from 27th and 28th February 2025 at Amity University, Tashkent, Uzbekistan.

***iv. REVIEWER FOR***

- IEEE Control and System Graduate Research Colloquium, Malaysia.
- IEEE International Conference on Automatic Control and Intelligent Systems, Malaysia.
- IEEE Conference on Systems, Process & Control, Malaysia.
- International Symposium of Engineering Technologies 2016 (ISET2016), Terengganu, Malaysia.
- IEEE Symposium on Computer Applications & Industrial Electronics, Malaysia.
- IEEE International Colloquium on Signal Processing & Applications, Malaysia.
- IEEE Conference on System Engineering & Technology, Malaysia.
- IEEE Symposium on Industrial Electronics & Applications, Malaysia.
- IEEE International Conference on Automatic Control & Intelligent Systems, Malaysia.
- International Symposium on Computational Intelligence & Applications (ISCIA2017), Malacca City, Malaysia.
- International Conference on Engineering, Life Sciences and Social Sciences (ICEL3S2018), Malacca, Malaysia.
- IEEE Symposium on Wireless Technology & Applications, Malaysia.
- IEEE International Conference on recent trends in Microelectronics, Automation, Computing and Communications Systems (ICMACC-22) in association with IEEE Hyderabad Section, India.
- DST-PURSE (A Department of Science and Technology - Promotion of University Research and Scientific Excellence) sponsored National Conference on Process Automation, Control and Computing (NCPACC), 2018.
- IEEE International Conference on Electrical, Computer, and Energy Technologies (ICECET '22), Prague, Czech Republic.
- IEEE International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2022). Male, Maldives.
- 2nd International Conference on Digital Management, Information Systems and Technologies, (DMIST2022) Shenyang, China.
- International Journal of Medical Engineering and Informatics, Inderscience.

- IEEE Symposium on Computers & Informatics, Shah Alam, Malaysia.
- IEEE International Conference on Mechanical, Automotive and Mechatronics Engineering (ICMAME 2023), Dubai. UAE.
- IEEE International Conference on Agrosystem Engineering, Technology & Applications - AGRETA 2023, Malaysia.
- International Journal of Plant & Soil Science.
- Asian Journal of Research in Computer Science
- IEEE 13th International Conference on System Engineering and Technology, Shah Alam, Malaysia.
- 14th IEEE Symposium on Computer Applications & Industrial Electronics, Penang Island, Malaysia.
- 9th IEEE International Conference on Automatic Control & Intelligent Systems 2024, Shah Alam, Malaysia.
- 3rd IEEE International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Canary Islands, Tenerife, Spain.
- 3rd IEEE International Conference on Electrical, Computer, and Energy Technologies (ICECET'23), Cape Town, South Africa.
- 3rd IEEE International Conference on Technological Advancements in Computational Sciences (ICTACS - 2023), Technically sponsored by IEEE region 8 (Europe, Middle East, and Africa) and IEEE Kazakhstan, Amity University, Tashkent City, Uzbekistan.
- IEEE International Conference on Computing, Communication, and Intelligent Systems (ICCCIS-2023), Sharda University, Greater Noida, India.
- Scopus indexed "International Conference on Recent Developments in Cyber Security (ReDCySec-2023)" conducted by Center for Cyber Security and Cryptology (CCSC), Sharda University, Greater Noida, Uttar Pradesh, India.
- Asian Journal of Electrical Sciences (AJES) Peer-Reviewed Journal (ISSN: 2249-6297), India.
- International Journal of Sustainable Engineering, Taylor and Francis Online.
- 2nd International Conference on Advancements in Smart Computing and Information Security (ASCIS) 2023, organized by Marwadi University
- Rajkot-Morbi Road, At & PO : Gauridad, Rajkot 360 003. Gujarat, India.
- Second International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE'24), Technically co-sponsored by IEEE Madras Section, Organized by VIT Vellore, India.
- International Conference on Computing and Data Analytics, December 2023, Organized by College of Computing and Information Sciences, University of Technology and Applied Sciences (UTAS), Ibri, Sultanate of Oman.
- 4th IEEE International Conference on Electrical, Computer and Energy Technologies (ICECET) Sydney, Australia. July 2024.
- International Conference on Sustainable Smart Computing and Green Energy (ICSSCGE-2024), WOXSEN UNIVERSITY, Kamkole, Sadasivpet, Sangareddy District, Hyderabad – 502345, Telangana, India.
- Asian Journal of Engineering and Applied Technology (AJEAT) Peer-Reviewed Journal (ISSN: 2249-068X), India.
- International Conference on Electrical, Electronics and Computing Technologies (ICEECT-2024), 29-31 August 2024, Sharda University, Greater Noida, Uttar Pradesh, India.
- B P International, India & Old Gloucester Street London WC1N 3AX, UK.
- 3rd International Conference on Advancements in Smart Computing and Information Security (ASCIS) 2024, organized by Marwadi University
- Rajkot-Morbi Road, At & PO : Gauridad, Rajkot 360 003. Gujarat, India.

- IEEE International Conference on Agrosystem Engineering, Technology & Applications - AGRETA 2024, Malaysia.
- International Conference on "Recent Advances in Artificial Intelligence, Communication, and Electronics Systems (RAICE-2025), Department of Electronics and Communication Engineering, Bharati Vidyapeeth's College of Engineering, A-4, Paschim Vihar, New Delhi 110 063, India.
- 4th IEEE International Conference on Technological Advancements in Computational Sciences (ICTACS - 2024), Technically sponsored by IEEE region 8 (Europe, Middle East, and Africa) and IEEE Kazakhstan, at Amity University, Tashkent City, Uzbekistan.
- 2nd IEEE International Conference on recent trends in Microelectronics, Automation, Computing and Communications Systems (ICMACC 2024) in association with IEEE Hyderabad Section, India.
- Fullerenes, Nanotubes and Carbon Nanostructures, Taylor & Francis.
- 2nd IEEE International Conference on Recent Advances in Information Technology for Sustainable development (ICRAIS-2024), Department of Information and Communication Technology, Manipal Institute of Technology,
- Manipal Academy of Higher Education, Manipal.
- ScholarOne - Transactions on Emerging Telecommunications Technologies
- International Journal of Innovative Research in Engineering (IJIRE)
- 4th IEEE International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2024). Male, Maldives.
- Springer International Conference on Recent Developments in Cyber Security (ReDCySec-2024), Organized by "Center for Cyber Security and Cryptology", Sharda University, Greater Noida, Uttar Pradesh, India.
- IEEE International Conference on Robotics and Technologies for Industrial Automation (ROBOTHIA2025) Kuala Lumpur, Malaysis.
- 3rd International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2024) from 09-11 December, 2024, BITS Pilani, Dubai Campus, Dubai International Academic City, UAE.
- 21st IEEE International Colloquium on Signal Processing and its Applications, 2025, IEEE Malaysia Control System Society.
- 5th International Conference on Electrical, Computer and Energy Technologies (ICECET), 2025 Paris, France.
- 2025 7th IEEE Symposium on Computers & Informatics (ISCI2025), Kuala Lumpur, Malaysia.
- IEEE International Conference on Artificial Intelligence and Data Engineering 2025 (AIDE-2025), Nitte, Karkala Taluk, Udupi-574110, Karnataka, India.
- IEEE International Conference on Technology Enabled Economic Changes (InTech-2025), at Amity University, Tashkent City, Uzbekistan.
- 5th International Conference on Electrical, Computer and Energy Technologies (ICECET) Paris, FRANCE from 03-06 July 2025.
- IEEE International Conference on Emerging Technologies in Engineering Applications (ICETEA 2025) at Sri Manakula Vinayagar Engineering College,
- Madagadipet, Puducherry - 605 107, India.
- 10th IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS 2025), IEEE Malaysia Section Control Systems Chapter (IEEE CSS Malaysia Chapter), 27-28 June @ Berjaya Times Square Hotel, Kuala Lumpur, Malaysia.
- Springer Nature (SN) Computer Science Journal
- 15th IEEE Symposium on Computer Applications & Industrial Electronics (ISCAIE 2025), IEEE Malaysia Industrial Electronics & Industrial Applications Joint Chapter, 24 - 25 May 2025 @ Parkroyal Penang, Penang Island, Malaysia.

- IEEE 8th International Conference on Electrical, Control and Computer Engineering (InECCE 2025), 27 - 28 August 2025 @ Kuantan, Pahang, Malaysia.
- IEEE 5th International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2025) @ Zanzibar, Tanzania from 16-19 October 2025, IEEE Chapter Istanbul TOPKAPI University.
- IEEE 3rd International Conference on Networks and Cryptology (NETCRYPT 2025), IEEE Conference Record Number: 65877. Theme: Intelligent Communication Networks, and Security. MAY 29 - 31, 2025 (Hybrid Mode). Organized By School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi, India.
- 1st International Conference in Pathway of Electrical, Automation, Communication and Electronics PEACE 2025, 11-12, April 2025 | Trichy, India, Organized by K.Ramakrishnan College of Technology, Trichy, India.
- 12th IEEE Symposium on Industrial Electronics & Applications, 26th-27th July 2025, Hybrid Conference Concorde Hotel, Kuala Lumpur, Malaysia.

**v. *EXAMINERSHIP***

1. Anna University, Chennai. 600 025. Tamil Nadu.
2. Annamalai University, Annamalai Nagar. Chidambaram. 608 002, Tamil Nadu.
3. Kongu Engineering College, Perundurai, Erode - 638 060. Tamil Nadu.
4. University of Kerala, Senate House Campus, Palayam, Thiruvananthapuram, Kerala 695 034.
5. Alagappa Chettiar Government College of Engineering and Technology, Karaikudi 630 003. Tamil Nadu.
6. Pondicherry University, Chinna Kalapet, Kalapet, Puducherry State. 605 014.
7. Pondicherry Engineering College, Pillaichavady, Puducherry, 605 014.
8. Sri Manakula Vinayagar Engineering College, Madagadipet, Puducherry - 605 107.
9. K.Ramakrishnan College of Technology, Kariyamanikam Road, Samayapuram, Tiruchirappalli – 621 112. Tamil Nadu.
10. Inter Departmental Expert member & Research Advisory Committee member in Annamalai University. Tamil Nadu.
11. **PhD research supervisor** in Annamalai University. Tamil Nadu. India.
12. **Doctoral Committee (DC) ECE Panel member** in Centre for Research (CFR), Anna University. Tamil Nadu. India.
13. **Doctoral Committee (DC) Panel member** in CFR for ECE department in Saranathan College of Engineering, Tiruchirappalli. Tamil Nadu. India.
14. K.Ramakrishnan College of Engineering, Samayapuram, Tiruchirappalli – 621 112. Tamil Nadu.
15. **Question Paper Scrutiny Member** at Gnanamani College of Technology (Autonomous), A.K.Samuthiram, Pachal (PO), Namakkal - 637 018. Tamil Nadu.
16. Gnanamani College of Technology (Autonomous), A.K.Samuthiram, Pachal (PO), Namakkal - 637 018. Tamil Nadu.
17. Centre For Research - Anna University, Ph.D Programme viva-voce Examination, **Subject Expert** for Oral Examination Board, 2024.
18. Subject Matter Expert (SME) for TCS iON, 2024.
19. **Question Paper Scrutiny Member** at Indra Ganesan College of Engineering (Autonomous), Tiruchirappalli, Tamil Nadu.

20. **Board of Studies (BOS**) Subject Expert Member at Indra Ganesan College of Engineering (Autonomous), Tiruchirappalli, Tamil Nadu - Electronics & Communication Engineering Department
21. **Question Paper Scrutiny Member** at Selvam College of Technology (Autonomous) Salem Road (NH 44), Pappinaickenpatti (post), Namakkal - 637 003. Tamil Nadu.
22. Selvam College of Technology (Autonomous) Salem Road (NH 44), Pappinaickenpatti (post), Namakkal - 637 003. Tamil Nadu.

### *vi. COMMITTEE MEMBERSHIP*

1. **Conference Committee Member** in International Association of Applied Science and Technology (IAAST)
2. **Publishing Committee Member** in International Association of Applied Science and Technology (IAAST)
3. **Editorial board member** of *American Journal of Embedded Systems and Applications*
4. **Technical Program Committee (TPC)** member for the **Springer** Sponsored, **Scopus** indexed "International Conference on Recent Developments in Cyber Security (ReDCySec-2023)" conducted by Center for Cyber Security and Cryptology (CCSC), Sharda University, Greater Noida, Uttar Pradesh, India – 201 310 during 16-17 June, 2023.
5. **Scientific Committee Member** at the International Conference of Computing and Data Analytics (ICCDA) organized by College of Computing & Information Sciences, University of Technology and Applied Sciences – Ibri, Sultanate of Oman.
6. **Scientific Committee Member** in the Annual International Congress on Computer Science, April 19-20, 2025, Oxford, United Kingdom.
7. **Technical Program Committee member** for the **IEEE** International Conference on Modelling Simulation & Intelligent Computing (MoSICom 2024) BITS Pilani, Dubai Campus, UAE.
8. University **CM Cell** Member, 2024.
9. **Technical Program Committee member** for the International Conference on "Recent Advances in Artificial Intelligence, Communication and Electronic Systems (RAICE 2025)", held from February 6th to 8th, 2025, organized by Department of Electronics and Communication Engineering in collaboration with Research & Development Cell at Bharati Vidyapeeth's College of Engineering, New Delhi. India.
10. **Reviewer** for ***Smart Wearable Technology (SWT)***, an international, peer-reviewed, gold open-access journal based in Singapore.

### *vii. HACKATHON PARTICIPATION*

1. Participated in the "India Automobile Hackathon" by NEC and Mitsubishi Corporation India Pvt. Ltd. 2022. Part of ***The U-Team***.
2. Participated in the IEEE Smart Sensing Hackathon "The Blue Sky Challenge" by IEEE Sensors Council Young Professionals Hackathon 2021, IEEE Advancing Technology for Humanity. 2022. Part of ***The U-Team***.
3. 1 idea "*Aqua Right*" **Shortlisted** for the Prototype phase in **Cloud Fest Hackathon 1**, 2022, Part of ***The U-Team***.

4. 2 ideas "*Say "NO" to Money Laundering with AI*!" and "*An AI based Organizational and Employee Exploitation Risk Analysis Engine*" **Shortlisted** for **International Fraud Group Hackathon** by IFG, 2022, Part of ***The U-Team***.

   ***"Won the 2nd Prize in the IFG x TA Hub Hackathon from a pool of (1008 registered) 967 participant Teams @ International Level"*** *for the idea "****An AI Based Organizational and Employee Exploitation Risk Analysis****"* Under the Theme, Risk Analyzer in Palm Oil Sector.
5. 2 ideas "*Aqua Chain*" and "*Or'gone*" **Shortlisted** for **5ire – Hackathon**, 2022, Part of ***The Hacksters*** Team.
6. Participated in the "ICTs for Indigenous Languages" by WSIS Forum 2022. Part of ***The U-Team***.
7. Participated in the "KardiaChain Pioneer Program 2.0" by aws Vietnam 2022. Part of ***The U-Team***.
8. Participated in the "Breaking the Bottleneck: Shortened Supply Chains" by GS1 US Hackathon 2022. Part of ***The U-Team***.
9. Participated in the "2022 Circle Hackathon", Circle - a global financial technology firm at the center of digital currency innovation and open financial infrastructure. Part of ***The U-Team***.
10. **Shortlisted** for the Prototype phase in **Hack the Normal 2022: Sustainability Program**, Part of ***The U-Team***.
11. 2 ideas "*Fit-O-Train*" and "*Ex.Cautio Opportunitas*" **Shortlisted** for **Hack For Sport** by Sporjo, India's First Sports Ecosystem & Gaming Hackathon, 2022, Part of ***The U-Team***.
12. Participated in the "HackForGood: Grab Hackathon 2022" by Grab. Part of ***The U-Team***.
13. 2 ideas "*AIcare - Skin Cancer Diagnosis Tool*" and "*Ret "AI" lz*" **Shortlisted** for **Cloud Fest Hackathon 2** Presented by **Google Cloud**, 2022, Part of ***The U-Team***.

    ***"Won the 1st Prize" in the*** **Cloud Fest Hackathon 2** ***from a pool of 8364 registered participant Teams @ International Level"*** Presented by **Google Cloud**, 2022, *for the idea "****AICare - Skinno****!"* under Healthcare Theme.
14. Participated in the **Rakathon'22**, Rakuten's flagship hackathon event, a 24 hours long coding competition by Rakuten India on 22nd & 23rd July 2022, Part of **The U Team**.
15. 1 idea "Learn 'o' Sys" **Shortlisted** for Prototype Building Phase in **Reinvent Chegg Hackathon'22,** Part of **2.0 - Reborn** Team.
16. Participated in the "HackZurich 2022" Europe's most renowned hybrid hackathon. Part of ***The U-Team***.

17. **Shortlisted** in the “Road Safety Hackathon” by Centre for Excellence for Road Safety (CoERS) IIT Madras, 2022.
18. “**Won the 1st Prize”** in the **DigitalGov Hack**, the Hackathon by WSIS Forum 2023, and

Digital Government Authority, Saudi Arabia in the Empowering young talent category, among 1170 registered participants and 894 teams @ International Level. Part of **2.0 - Reborn** Team.

19. Participated in the “Tata Crucible Hackathon 2022” by Tata InnoVerse Team, 2022. Part of **The U Team**.
20. **Shortlisted** in the “MSME Idea Hackathon 2.0” under the Ministry of MSME Innovative scheme, 2022. Part of **The U Team**.

**MSME Idea Hackathon 2.0 Winners - 15 Lakhs funding** for idea development for Incubation component under MSME (Ministry of Micro, Small and Medium Enterprises) Innovative Scheme, Government of India. Reference No. IDEATN007116.

21. Participated in the “Build a Climate Fintech App” by Rapyd Hackathons, 2022. Part of **2.0 Reborn Team**.
22. **Shortlisted** for Round 2 Prototype submission phase in **airtel iQ Edtech** hackathon from a pool of 609 participant teams, 2023. Part of **The U Team**.
23. **Shortlisted** for the Prototype submission phase for **bobWorld hAAckathon by Bank of Baroda** 2023. Part of **2.0 - Reborn** Team.
24. Participated in the “Smartathon” by SDAIA (Saudi Data and Artificial Intelligence Authority), 2023. Part of **2.0 Reborn Team**.
25. Participated in the “Rolls Royce Hackathon” R² Data Labs Responsible Growth Hack by R² Data Labs, 2023. Part of **2.0 Reborn Team**.
26. **Shortlisted** for the Prototype submission phase for **Skill-A-Thon[1.0]** NDEAR (National Digital Education Architecture) – ONDC (Open Network for Digital Commerce) Education & Skilling Hackathon under Open Innovation **Challenge** by EkStep Foundation from a pool of 4058 registered participants and 2960 teams, 2023. Part of **2.0 - Reborn** Team.
27. Participated in the “NuHarbor Hackathon” by The Cybersecurity Polyglot Project, 2023. Part of **2.0 Reborn Team**.
28. **Shortlisted** and **Finalist** for the idea Submission round at PLEDGE TO PROGRESS Sustainability Hackathon sponsored by Microsoft., 2023. Part of 2.0 - Reborn Team.
29. One idea submitted to ODS23 “oneAPI Dev Summit and Hackathon 2023”.

30. One idea submitted to "ROAD SAFETY HACKATHON 2023- INDIA SPECIFIC 'ADAS' DEVELOPMENT" conducted by Centre of Excellence for Road Safety (CoERS), **IIT Madras**.
31. **Finalist** in the AutoTech Hackathon conducted by KIIT (Kalinga Institute of Industrial Technology) TBI (Technology Business Incubator) in association with Ashok Leyland. July 2023.
32. **Won the 2nd Prize (Runner Up) in the "inCode Hackathon 2023 - Challenging injustice"** for the idea ***VoiceRa*** under the Theme **"Safety"** from a pool of 2496 registered Teams. Part of **2.0 - Reborn** Team.

**33. Finalist** in the Catalyse Tech, A SELCO Foundation Initiative, On Farm Technologies Innovation Challenge. In collaboration with ATAL Incubation Centre. 2023.

***viii. FUNDING/GRANT SANCTIONED***

**15 Lakhs funding** for idea development for Incubation component under **MSME** (Ministry of Micro, Small and Medium Enterprises) Innovative Scheme, **Government of India**. Reference No. IDEATN007116, **Idea/Innovation: Aqua Chain.** For nurturing & development of Ideas approved in 4th PMAC (Project Monitoring and Advisory Committee) of MSME Innovative Scheme held on 26.06.2023. Part of **The U Team.**

***ix. CERTIFICATIONS***

- **Intel oneAPI Innovator**
- Digital Productivity and AI Fluency
- **Innovation Mentor – StartupTN**
- **(AICTE - NITTTR) Mentor** - National initiative for Technical Teachers Training
- Microsoft Educator Academy Professional

## MEMBERSHIP IN PROFESSIONAL BODIES

The Institution of Engineers (India) - M-1626390