PATENT :

1. D.Kalaiselvi, "**AI (Artificial Intelligent) based Gas detection and prevention device using Microcontroller and zigbee approach**" Application No: 202241007199 A, published on 18ᵗʰ February 2022.

2. D.Kalaiselvi, "**IoT based intrusion Discovery and Filtering System by using Raspberry-pi**" Application No:202141001811 A, published on 28ᵗʰ January 2022.

3. D.Kalaiselvi, "**Design of Defeated Ground Structured Fermi tapered Antenna for Future Generation Communication**" Application No:20214103331 A, published on 11ᵗʰ November 2021.

International Journals

1. D.Kalaiselvi, "**Implementation of Station Vigilant Using RF For Railway Passengers**", accepted for Publication in Recent Advancement in Mechanical Engineering and Industrial Management, 30 January 2023.

2. D.Kalaiselvi, "**Microcalcification detection in Digital Mammograms using Deep Learning Approaches**" accepted for Publication in AIP conference Proceedings (ISSN 1551-7616), July 2021.

3. D.Kalaiselvi, "**Aurdino and Ultrasonic sensor based Automatic water Dispenser Machine**", (SCOPUS indexed), March 2021

4. D.Kalaiselvi, "**A Study on Cloud Computing Challenges and its mitigations**", Elsevier-materials today proceedings. (SCOPUS indexed), December 2020

5. D.Kalaiselvi, "**Landslide Monitoring using Flux sensor by wireless technique**", International Journal of Innovative Research in Science , Engineering and Technology. Volume no:06,Issue 03, March 2016.

6. D.Kalaiselvi, "**Design and FPGA Implementation of Digital Circuits using Reversible Logic**" ,International Journal of Innovative Research in Science , Engineering and Technology.ISSN :2319-8753 Volume no:05,Issue 03, March 2016.

7. D.Kalaiselvi, "**Design and Analysis of Elevator Control System using PLC**", International Journal of Advanced and Innovative Research. ISSN :2278-7844 Volume no:04,Issue 03, May 2015.

INTERNATIONAL CONFERENCES:

1. Participated and Presented a paper Title "**Star Shaped Penta Frequency Microstrip Radiating Element Design for X , C Band and Satellite Communication**" in The 6th International Conference on Trends in Electronics and Informatics (ICOEI 2022) organized by SCAD College of Engineering and Technology, Tirunelveli and published by IEEE (978-1-6654-8328-5) during May 9-11ᵗʰ 2022.

2. Participated and Presented a paper Title "**Design of Narrowband Truncated**

Rectangular Antenna for Breast Cancer Detection" in International Conference on Applied Artificial Intelligence and Computing (ICAAIC 2022) organized by Narasu's sarathy institute of technology, selam and published by IEEE (978-1-6654-9710-7) during April 28-30th 2022.

3. Participated and Presented a paper Title " **Aurdino and Ultrasonic sensor based Automatic water Dispenser Machine"** in the International Conference on Nano Electronics, Machine learning, Internet of things and computing systems (NMIC-2021) organized by IETE at Advanced Regional Telecom Training Center, BSNL, Jharkhand during March 13-14th 2021.

4. Attended **International conference** at Karpagam College of Engineering, Coimbatore on 13th and 14th march 2014 and presented paper entitled " **Efficient implementation of AES-Rijndael Encryption in Reconfigurable Hardware"** in International Conference on Innovations in information, Embedded and Communication Systems.

5. Attended N**ational Conference** at Sri Venkateswara college of Engineering and Technology, Thiruvallur, on 18th and 19th April 2012 and presented paper entitled **"Wireless Sensors Network(WSN) for Tactical Border Surveillance System to Detect, Classify and Track Enemy Intrusion in Hilly and Vally Region"** in Emerging Trends in Electronics, Communication and information Technology.

NATIONAL CONFERENCES:

1. Attended N**ational Conference** at GRT Institute of Engineering and Technology, Tiruttani, on 18th march 2016 and presented paper entitled **" Design and FPGA Implementation of Digital Circuits Using Reversible"** in Emerging Trends in Electronics, Communication and information Technology.

2. Attended **National Conference** at RMD Engineering college, Kavaraipettai, on 17thMarch 2012 and presented paper titled **"Capacitor Balanced Issues of the Diode clamped Multilevel Inverter"** on IETE National Conference on Networking and Communication.

3. Attended **National Conference** on **"SATELLITE IMAGE CONTRAST ENHANCEMENT USING DWT & SVD"** at Pallavan college of Engineering on 17thFebruary 2012**.**

AICTE - NITTT MODULE:

- **Module 1:** Orientation towards Technical Education & Curriculum Aspects -Completed
- **Module 2:** Professional Ethics Sustainability -Completed
- **Module 3:** Communication Skills, Modes and Knowledge Dissemination -Completed
- **Module 4:** Instructional Planning and Delivery -Completed
- **Module 5:** Technology Enabled Learning and Life-long self-learning -Completed
- **Module 6:** Student Assessment and Evaluation -Completed
- **Module 7:** Creative Problem Solving, Innovation and Meaningful research and development – Completed
- **Module 8:** Institutional Management & Administrative Procedures -Completed

Awards

1. Received **National Education Excellence achievers award** from Navbharat Rashtriya Gyanpeeth, Pune, Maharashtra on 20th March 2022

2. Received **Best paper award** for publication the title " **Aurdino and Ultrasonic sensor based Automatic water Dispenser Machine"** in the International Conference on Nano Electronics, Machine learning, Internet of things and computing systems (NMIC-2021) organized by IETE at Advanced Regional Telecom Training Center, BSNL, Jharkhand during March 13-14th 2021.

NPTEL Course:

1. Successfully Completed JUL-SEP 2024 NPTEL Online Course for **"Research Methodology"** with **Elite.**

2. Successfully Completed JAN-APR 2024 NPTEL Online Course for **"Deep Learning"**.

3. Successfully Completed JAN-APR 2023 NPTEL Online Course for **"Microprocessors and Microcontrollers"**

4. Successfully Completed Sep-Dec 2020 NPTEL Online Course for **"Control Systems"**

5. Successfully Completed Sep-Dec 2020 NPTEL Online Course for **"Digital Circuits"**

ONLINE COURSES:

1. Successfully completed and received the certificate for **"PY0101EN: Python Basics for Data Science"** on 26.05.2021 provided by **edx**.

2. Successfully completed and received the certificate for **"ENES462x: Marketing Innovative Products and Services"** on 14.05.2021 provided by **edx**.

3. Successfully completed and received the certificate for **"Python 101 for Data Science"** on 25.05.2020 provided by **Cognitive Class**.

4. Successfully completed and received the certificate for **"Successful Carrier Development"** on 25.05.2020 provided by **Coursera**.

5. Successfully completed and received the certificate for **"AI for Everyone**" on 02.07.2020 provided by **Coursera**.

6. Successfully completed and received the certificate for **"Learning How to Learn: Powerful mental tools to help you master tough subjects"** on 11.08.2020 provided by **Coursera**.

7. Successfully completed and received the certificate for **"Cloud Computing Basics (Cloud 101)"** on 04.06.2020 provided by **Coursera**.

8. Successfully completed and received the certificate for **"Getting Started with AWS Machine Learning"** on 29.05.2020 provided by **Coursera**.

9. Successfully completed and received the certificate for **"TCP/IP and Advanced Topics"** on 04.07.2020 provided by **Coursera**.

10. Successfully completed and received the certificate for **"Solar Energy Basics"** on 11.07.2020 provided by **Coursera**.

11. Successfully completed and received the certificate for **"Electric Power System"** on 18.06.2020 provided by **Coursera**.

12. Successfully completed and received the certificate for **"Wind Energy"** on 12.07.2020 provided by **Coursera.**

13. Successfully completed and received the certificate for **"FPGA Computing Systems: Background Knowledge and introductory Materials"** on 29.06.2020 provided by **Coursera**.

14. Successfully completed and received the certificate for **"Step into Robotic process automation"** on 24.05.2020 provided by **GUVI**.

15. Successfully completed and received the certificate for **"Introduction to Electronics"** on 28.06.2020 provided by **Coursera**.

16. Successfully completed and received the certificate for **"Fundamentals of Network Communication"** on 19.06.2020 provided by **Coursera**.

17. Successfully completed and received the certificate for **"The Python3 Certification Course"** on 28.05.2020 provided by **Udemy**.

18. Successfully completed and received the certificate for **"Google Tag Manager Course 2020- from Beginner to Advanced"** on 02.06.2020 provided by **Udemy**.

19. Successfully completed and received the certificate for **"PID Control with Arduino"** on 08.09.2020 provided by **Udemy**.

20. Successfully completed and received the certificate for **"How to code a MATLAB/Simulink automation from scratch"** on 08.09.2020 provided by **Udemy**.

21. Successfully completed and received the certificate for **"Complete Machine Learning with R studio-ML for 2020"** on 31.08.2020 provided by **Udemy**.

ATAL FDP:

1. Attended online ATAL FDP on **"Unveiling Quantum Computing from Qubits to Quantum Algorithms: An Interdisciplinary Engineering Perspective"** at R.M.K.College of Engineering and Technology from 02/12/2024 to 07/12/2024

2. Attended online ATAL FDP on **"IoT in Healthcare: Transforming Patient Care and Management"** organized by SRI VENKATESWARA COLLEGE OF ENGINEERING from 09/12/2024 to 14/12/2024.

3. Attended online ATAL FDP on **"Electric Vehicle & Charging Station Technology for Sustainable Development"** at NIT Jamshedpur from 13/01/2025 to 18/01/2025.

4. Attended online ATAL FDP on **"AI powered IOT Based Sustainable Energy Management at College of Engineering"**, Guindy, Anna University from 10/02/2025 to 15/02/2025.

5. Attended online ATAL FDP on **"Deep learning using Neural Networks"** from 08.11.21 to 13.11.21 by Veer Madho Singh Bhandari Uttarakhand Technical University.

6. Attended online ATAL FDP on **"Electric Vehicle: Challenges and Opportunities in future India"** organized by RMKCET from 20.09.2021 to 24.09.2021.

7. Completed successfully AICTE Training and Learning **(ATAL)** Academy online **FDP** on **"Electric vehicles: challenges and opportunities in Future India"** from 20.09.2021 to 24.09.2021 at RMK College of Engineering and Technology.

8. Completed successfully AICTE Training and Learning **(ATAL)** Academy online **FDP** on **"Sensor Technology In Lifestyle Enrichment"** from 02.08.2021 to 06.08.2021 at Easwari Engineering College.

9. Completed successfully AICTE Training and Learning **(ATAL)** Academy online **FDP** on **"Research Avenues and Challenge in Industry 4.0"** from 14.06.2021 to 18.06.2021 at R.M.D Engineering College.

10. Completed successfully AICTE Training And Learning **(ATAL)** Academy online **FDP** on **"Blockchain Integrated with IoT"** from 05.07.2021 to 09.07.2021 at PSNA College of Engineering and Technology.

11. Completed successfully AICTE Training And Learning **(ATAL)** Academy online **FDP** on **"Energy Storage"** from 05.10.2020 to 09.10.2020 at Bharathiar University.

12. Completed successfully AICTE Training And Learning **(ATAL)** Academy online **FDP** on **"Energy Engineering"** from 17.09.2020 to 21.09.2020 at Velammal Engineering College.

AICTE Training and Learning Academy Online STTP and FDP Participation:

1. Attended online STC on **"Tools for Research in Cloud, Fog and Edge Computing"** from 21/10/2024 to 25/10/2024 (One Week) by NITTTR, Chandigarh.

2. Attended online STC on **"AI for Engineering Applications"** from 04/11/2024 to 08/11/2024 (One Week) by NITTTR, Chandigarh.

3. Attended online STC on "**Air, Water Pollution and Health"** from 31st July to 4th August 2023 (One Week) by NITTTR, Kolkata.

4. One week online Faculty Development Programme titled FDPOM - 136 **"Applications in PLC ''** Conducted by NITTTR, Chennai. From 07.02.2022 to 11.02.2022

5. 6 days GCT-FDTP on **" EE3251 Electric Circuit Analysis "** from 03.01.2022 to 08.01.2022 by Anna University Chennai.

6. Attended online STC on **" Artificial Neural Networks and Fuzzy Logic"** from 27.09.2021 to 01.10.2021 by NITTTR, CHANDIGRAH

7. Participated Online Training Program FDPOM-81 on **"Electrical and Electronics for wind and solar"** Conducted by **NITTTR, Chennai** From 04.10.2021 to 08.10.2021.

8. Online Training Programme on **"Advanced Pedagogy"** from 30.08.2021 to 03.09.2021 (One Week) by NITTTR, Chennai

9. ISTE Sponsored FDP on **"BIO- INSPIRED LEARNING**" held from 20.12.2021 to 24.12.2021 by Sri Sai Ram Engineering College

10. Six Days Faculty Development Program on **"Research Challenges in Cognitive Radio Networks"** from 20.09.2021 to 25.09.2021 by Vel Tech R&D Institute of Science and Technology, Chennai

11. AICTE- ISTE Sponsored six days induction / Refresher Program **on "Smart City and Smart Society"**, from 27.12.21 to 01.01.22 by GRG Polytechnic college, Coimbatore

12. Attended FDP on **FDPOM-59 "ADVANCED PEDAGOGY"** From 30.08.2021 to 03.09.2021 at NITTTR, Chennai.

13. Successfully completed 6 days FDP on **"Recent Advancements in organic & Nano Electronics RAONE-21 "** from 08.10.21 to 13.10.21 organized by SRMIST.

14. Successfully completed 30 days Master class on **"Internet of Things"** from 19.09.21 to 18.10.21 organized by pantech e learning.

15. Attended online STC on **"Artificial Neural Networks and Fuzzy Logic"** from 27.09.2021 to 01.10.2021 at NITTTR, Chandigarh.

16. Participated Online Training Program on **"Outcome Based Education"** Conducted by **NITTTR, Chennai** From 21.06.2021 to 25.06.2021.

17. Six days Virtual **STTP** on **" Applications of Artificial Intelligence towards Industry 4.0 "** organized by Sri Sai Ram Engineering College From 18.01.2021 to 23.01.2021.

18. Teaching and Learning **online FDP** for **"8051 Microcontroller and its applications"** from 27-04-20 to 01-05-20 (One Week) by **NITTTR, Chandigarh**.

19. Teaching and Learning **online FDP** for **"Accerediation in Technical Education"** from27-04-20 to 01-05-20 (One Week) by NITTTR, Chandigarh.

20. Teaching and Learning **online FDP** for **"Artificial intelligence and its applications"** from 27.07.20 to 31.07.2020 organized by NITTTR, Chandigarh and Dr.Ambedkar National Institution of Technology, Jargand.

21. One day **STTP** on **"Blockchain Technology and Emerging Trends in Information Security"** organized by Sri Venkateswara College of Engineering on 15.05.2020.

FDP & Workshop:

1. Attended two days online FDP on **"Cloud infrastructure"** at SASI institute of technology and Engineering in association with Pencil bitz on Nov 8th and 9th, 2024.

2. Attended two days online FDP on **"Advanced AI tolls for preparing research papers"** at PSNA college of Engineering and technology, from 21th to 29th Aug, 2023.

3. Two days national Workshop on **"Emerging Trends in Power Engineering"** conducted by the Department of Electrical Engineering, NIT Warangal from 30-Jan-2023 to 31-Jan-2023.

4. 5-day online FDP on the theme **"Inculcating Universal Human Values in Technical Education"** organized by All India Council for Technical Education(AICTE) from 13 September, 2021 to 17 September, 2021.

5. Five days International Workshop on **"Deep Learning in Health Care"** from 06/09/21 To 10/09/21 Sponsored by SPARC-IITK, MHRD.

6. Attended Workshop on **"AICTE Incorporating Universal Human Values in Education (An AICTE Initiative)"** from 13.09.2021 to 17.09.2021 organized by AICTE.

7. Attended Five days International Workshop on **"Deep Learning in Health Care"** Sponsored by SPARC-IITK, MHRD at SRM Institute Of Science And Technology, Kattankulathur from 06/09/21 To 10/09/21.

8. Participated 3 days FDP on **"Research perspective in AI & its Applications"** held from 22.07.21 to 24.07.21 organized by RMKCET.

9. Participated FDP on **"Art of Writing Research Article and IPR"** held from 19.07.21 to 23.07.21 organized by Sri Krishna Institute of Technology.

10. Participated 5 days FDP on **"Embedded systems and IoT in Biomedical Applications (ESIBA)"** held from 12.07.21 to 16.07.21 organized by RMD Engineering College.

11. Participated in 3 days **"Examination Reforms"** Workshop in online mode held from 28.06.21 to 30.06.21 jointly conducted by AICTE & KLE Technological University, Hubli, Karnataka.

12. Attended Six days online **Faculty Development Program** on **"Research Innovation and Emerging Advance in Electrical Engineering "** at **Easwari Engineering College** from 14.06.2021 To19.06.2021

13. Attended online **Faculty Development Program** on **"Advances in VLSI, Embeddedand Signal Processing"** at **Er.Perumal Meenakshi College of Engineering** from 04.06.2021, 05.06.2021 and 07.06.2021.

14. Attended 5 days COVID relief online **Faculty Development Program** on **"Recent Trends and Research Perspective on Energy and Power System"** at **PSN College ofEngineering and Technology** from 31.05.2021, 04.06.2021 and 07.06.2021.

15. Attended **one Week** online AICTE Sponsored **Faculty Development Program** on **"Recent Advances in Electronics & Telecommunication Engineering"** at **Jabalpur Engineering College, Jabalpur under the Activity of Technical Education Quality Improvement Programme – III (TEQIP – III).** from 28.09.20 To 03.10.20.

16. Attended **Two Weeks** online AICTE Sponsored **Faculty Development Program** on **"High Power Conversion Electronics for Green Energy Based Smart Grid"** at **S.A.Engineering College** from 16.11.2020 To28.11.2020

17. Attended **Faculty Development Program** on " **Innovation In Renewable Energy For Future India"** at **RMD Engineering College Kavaraipettai** from 11.05.2020 to13.05.2020

18. Attended Faculty Development Program on " Key Technologies Driving Fourth **Industrial Revolution"** at **RMD Engineering College Kavaraipettai** from 10.06.2020 to 15.05.2020.

19. Attended **Faculty Development Program** on **"Effective and Instructive Research"** at Sona College Of Technology, Salem from 04.05.2020 To 10.05.2020 (One Week).

20. Attended five days online **Faculty Development Program** on **"CS6701- Cryptography and Network Security"** at **Panimalar Institute of Technology** from11.05.2020 To15.05.2020

21. Attended **Faculty Development Program** on **"Augmented Reality and VirtualReality"** at Dr.M.G.R Educational and Research Institute 15.05.2020

22. Attended one week **Faculty Development Program** on **"Embracing the creative side of teaching and Learning methods "** at R.M.K College of Engineering and Technology from 29.06.2020 To 03.06.2020

23. Attended 5 days **Faculty Development Program** on **"Data Science Using Python"** at Jeppiaar Institute of Technology from 18.05.2020 To 22.05.2020

24. Attended **Faculty Development Program** on **"NBA and NAAC Accreditation Process"** at M S Ramiah Institute Of Technology from 04.06.2020 To 08.06.2020

25. Attended **Faculty Development Program** on " **Innovation In Renewable Energy For Future India"** at **RMD Engineering College Kavaraipettai** from 11.05.2020 to13.05.2020

26. Attended **work shop** in Application of **MATLAB/SIMULINK to ElectricalEngineering** on 31 Jan at MAGNA college of Engineering.

27. Attended **"Recent Trends in Wireless Communication "** at Sri Venkateswara College of Engineering and Technology, Chennai,Tamilnadu from 27.05.2013 to02.06.2013

28. Attended Faculty Development Trainning Program on **"Linear Integrated Cirucits"** at Madha Engineering College , Kundrathur, Chennai,Tamilnadu from 09.12.2013 to 14.12.2013.

29. Attended Faculty Development Trainning Program on **"Communication Theory"** at Velammal Engineering College , Surapet, Chennai,Tamilnadu from 03.12.2014 to 09.12.2014.

30. Attended Faculty Development Trainning Program on **"Signals and Systems"** at GRT Institude of Engineering and Technology , Truttani, Tamilnadu from 05.05.2012 to 10.05.2012.

WEBINOR:

1. Attended **Webinar Series** on **"Cyber Security - Need of the hour"** organized by IEI - ELC and SEC - IIC on 27.05.2021

2. Attended **Webinar** on **"IPR and IP Management for Innovation and Start-ups"** at RMK ENGINEERING COLLEGE 15.05.2020.

3. Attended **Webinar** on **"Research publications, process, credentials and outcomes"** organized by BABA INSTITUTE OF TECHNOLOGY AND SCIENCE on 09.05.2020

4. Attended **Webinar** on **"Know the Talent Race"** organized by Jeppiaar Institute of Technology on 26.05.2020

5. Attended **Webinar** on **"Mindset Crafting and Anchoring Emotions",** Held On 13th July 2020, Organized By Dr. Ambedkar Institute Of Technology, Bengaluru.

6. **Participated on "NDLI User Awareness Programme for R.M.D.E.C held on 23.06.2021 organized by the NDLI Club of R.M.D. ENGINEERING COLLEGE NDLI Club**

7. Attended **Webinar Series** on **"Satellite and Automation"** organized by GSSS Institute of Engineering and Technology for Women on 11.05.2020 To 13.05.2020

8. Attended **Webinar Series** on **"Virtual And Augmented Reality"** organized by SA Engineering College on 22.04.2020

9. Attended **Webinar Series** on **"Design of 5G Antennas using CST software"** St.Joseph's College of Engineering and Technology on 26.05.2020

10. Attended **Webinar Series** on **"IoT for Automotive Electronics"** SA Engineering College on 01.05.2020

11. Attended **Webinar Series** on **"Design Of High Speed Wireless Communication System"** R.M.D Engineering College on 05.05.2020 to 07.05.2020

12. Participated **Webinar** on **"IPR and IP Management for Innovation and Start-ups"** Organized by R.M.K Engineering College on 15.05.2020.

13. Participated **Webinar** on **"Contemporary Challenges And Issues In Intellectual Property Rights In Academia And Industries Under Covid-19"** by R.M.K Engineering College on 06.06.2020

14. Attended **National level webinar** on **"COVID 19: Yesterday, Today and Tomorrow"** Organized by R.M.K Engineering College on 14.06.2020

15. Attended 1 day **International Webinar** on **"Cloud Computing Technology"** at Arignar Anna Institute of Technology on 20.06.2020

16. Attended 5 days **International Webinar Series** on **"Emerging Green Technologies for Smart Cities: Challenges and Opportunities"** joinly organized by RVS College of Engineering and Technology, Coimbatore and New Horizon College of Engineering, Bengaluru from 16.06.2020 To 20.06.2020.

17. Attended **National level webinar** on **"Telemedicine, IOT and Nano science"** organized by GSSS Institute of Engineering and Technology for Women from 10.06.2020 to 12.06.2020.

18. Attended **National level webinar** on **"Key Technologies Driving Fourth Industrial Revolution"** Organized by R.M.D Engineering College on 10.06.2020 to 15.06.2020

19. Attended **National level webinar** on **"Advanced Antenna Design Principles"** organized by SSN College of Engineering 25.06.2020 To 27.06.2020

20. Attended **webinar** on **"Satellite Communication"** organized by DMI College of Engineering 27.06.2020

21. Attended **webinar** on **"VIRTUAL AND AUGMENTED REALITY"** organized by S.A Engineering College with MAX on 22.0.2020