

KINGS COLLEGE OF ENGINEERING
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Name : Dr.R.PONNI	
Designation:	Associate Professor
Qualification:	M.E., Ph.D
Area of Specialization:	Wireless Sensor Networks
Experience:	Teaching: 19 Years
No. of Programme attended:	Workshop: 11 Conference: 8 FDP: 07
Publication:	Journal National:-NIL International:03
	Conference National: 04 International: 04
AU Guideship:	Recognized as a Supervisor by Anna University, Chennai. Ref.No: 4590003
Membership	• Institute of Electrical & Electronics Engineers (IEEE). • ISTE
Grant & Awards Received	• Received Grant of Rs. 7,500/- from TNSCST, Chennai. • Participated in Science City Project Expo-2018 and won third prize with cash award.

JOURNAL PUBLICATIONS

1. Ponni.R, Jayasankar.T & Vinothkumar.K **"Investigations on underwater acoustic sensor networks framework for RLS enabled LoRa Networks in Disaster Management Applications"** in Journal of Information Science and Engineering , Volume & Page no: Vol. 39 No. 2, pp. 389-406,DOI: 10.6688/JISE.202303_39 (2).0009, ISSN: 1016-2364. **(Annexure – I)**
2. Ponni.R, Jayasankar.T ,Ashokkumar.V& N.Malathi" **Enhanced Dwarf Mongoose Optimization based Node Localization**" in Journal Tehnicki vjesnik / Technical Gazette Vol.31/No.4,Print: ISSN 1330-3651,Online: ISSN1848-6339. <https://doi.org/10.17559/TV-20230809000864>. **(Annexure – I)**
3. Salem Jeyaseelan WR , Jayasankar T , Vinoth Kumar K , Ponni R **"Improved Grey Wolf Optimization Based Node Localization Approach in Underwater Wireless Sensor Networks"** in Journal of MEASUREMENT SCIENCE REVIEW, 24, (2024), No. 3, 95-99. ISSN 1335-8871, DOI: 10.2478/msr-2024-0013. **(Annexure – I)**
4. R. Ponni , R. Sharmila , T. Jayasankar and Chandrasekar Perumal **"Enhancing Environmental Sustainability: Extreme Learning Machine Approach to Industrial Waste Management"** in Journal of Environmental Nanotechnology.,Vol. 13(2), 220-228 (2024). **(Scopus Indexed)**
5. Ponni R., Akalya K., Harini M., Jenifer X., Megala M." **Safe Zone Identification and Safety Alert System For Fisher Men**" in International Journal of Applied Engineering and Technology ISSN: 2277-212X ,2020 Vol. 9, pp.129-138/Research Article (Open Access).
6. R. Ponni , T. Jayasankar and V. Jonce Anjaline **"Image Segmentation and Volume Estimation of Thyroid Nodules using Ultra Sound Image"**in Bioscience Biotechnology Research Communication(BBRC) Special Issue Vol. 12 No (1) March 2019. DOI: 10.21786/bbrc/12.1/19.
7. R. Ponni ,Mowli ,Jaishree, Kanishkakarini, Mahalakshmi bai **"Revelation of cancer cells based on microscopic images in blood sample"**in International Journal of Engineering Research and Technology(IJERT) ISSN:2278-0181,Special issue 2018.
8. R. Ponni,S.Manisha,S.Monisha,G.Nandhini**"Real Time Implementation and Investigation of Wireless Electrical Stimulation for Peripheral Nerves"**in International Journal of Trends in Scientific Research and Development,Vol.3,Issue.3,e-ISSN:2456-6470,2019.
9. Rinitha.R , Ponni.R **"FPGA Implementation of BIST in OFDM Transceivers"**in International Research Journal of Engineering and Technology (IRJET), Volume: 03 Issue: 02 | Feb-2016, e-ISSN: 2395 -0056, p-ISSN: 2395-0072.

CONFERENCE PUBLICATIONS: International Conferences/National Conference:

1. Presented paper on “**Automated Attendance and Location Tracking System**” in the International Conference on Sustainable Technologies in Engineering and Science-2025 at Kings College of Engg, Punalkulam on 08.05.2025.
2. Presented paper on “**IoT based Fuel system level Monitoring and Fuel theft detection**” in the International Conference on Intellectual Research in Science, Engineering and Management (2023) at St. Joseph College of Engineering and Technology, Thanjavur on April 21st, 2023.
3. Presented paper on “**Establishing communication in Disaster management using Novel Energy approach using MANET**” in the National conference on “Advancement in Electronics and Communication for Digital India” at Kings College of Engg, Punalkulam on March 17, 2021.
4. Presented paper on “**Active handover position based signaling sensor networks**” in the National conference on emerging trends in Computing, Control and Communication Technologies (NTCCCT 20) at Kings College of Engg, Punalkulam on March 13, 2020.
5. Presented paper on “**Safe Zone Identification and Safety Alert System for Fishermen**” in the International conference on Intellectual Research in science, Engineering and management (ICIRSEM 2020) at St. Joseph College of Engineering and Technology, Thanjavur on March 09, 2020.
6. Presented a paper titled “**Segmentation and volume estimation of Thyroid module using ultra sound image**” in International Conference on Innovations in Engineering Technology and science (ICIETS-2018) at K.Ramakrishnan College of Engineering, Thiruchirappalli on 13th March 2018.
7. Presented a paper titled “**LTE A with CA: A Choice of upgrade the Performance**” in National Conference on Advanced Communication, Computing and Power Systems at St. Joseph College of Engineering and Technology on 23rd March 2018.
8. Presented a paper titled “**High Data rate Power Line Communication with Li-Fi System for Indoor Communication**” in National Conference on Innovations in Embedded Systems and Networking (NCIEN-18) at Kings College of Engineering on 21st March 2018.

CONFERENCE ORGANIZED:

1. Organized National conference on emerging trends in Computing, Control and Communication Technologies (NTCCCT 20) on 13.03.2020.

ORGANIZED – ANNA UNIVERSITY /NITTTR/INTERNATIONAL WEBINAR

1. Organized **Anna University** Approved Seven days Faculty Development Programme on **“Electronic Circuits –II”** from 8.12.2014 to 15.12.2014. **(Coordinator)**
2. Organized **NITTTR FDP** on **“5G Communication”** from 18.11.2019 to 22.11.2019. **(Coordinator)**
3. Organized **International webinar** on **“Amazon Web Services with EC2,EB, and S3”** on 29.06.2020. **(Coordinator)**

ORGANIZED-OTHER FDPs/ SEMINARs / WORKSHOPS/LOCAL VISITS

S.No	Name of the Programme(s)	Duration
1.	Workshop on “4G/5G Technology” .	26.09.2024
2.	Webinar on “Enabling Technologies for 5G Communication” .	20.05.2022
3.	Webinar on “Overview of machine learning, Deep learning and natural language processing using python” .	27.05.2020
4.	Webinar on “Agile Methodologies” .	01.06.2020
5.	Symposium e-blast -2017 .	01.09.2017
6.	Local visit to KG Hospital to learn on “Medical Electronics” .	13.02.2018
9.	Guest lecture on “VLSI Design & Sequential Circuits” Organized project Expo'2015.	23.01.2015
10.	Symposium e-blast- 2013 .	14.09.2013
11.	Workshop on “FPGA Design and VHDL Programming”	07.03.2014-08.03.2014
12.	Value added course on “Embedded systems” .	2012-5 Days
13.	Value added course on CCNA for IV year.	2011- 20 days
14.	Symposium e-blast 2009 .	08.09.2009
15.	Industrial Visit to Kerala for 4 days.	2009
16.	Industrial Visit to Bangalore for 5 days.	2007
17.	Local Visit to ADHISAYAM, Madurai (Sponsored by Management).	2007
18.	Industrial Visit to Bangalore-BEL for 4 days.	2006
19.	Local visit to ROHINI Hospital, Thanjavur to learn about “Medical Electronics” .	2006

ATTENDED –IIT/ NIT/ATAL/NITTTR/INTERNSHIP/Sponsored programmes:

1. INTERNSHIP on “**Machine learning Unleashed: Harnessing the potential of AI for innovation and growth**” at Marcello Tech, Trichy from 17.05.2024 to 23.05.2024.
2. **Anna University sponsored FDP** on “**Wireless Communication**” Thiagarajar College of Engineering, Madurai, Tamilnadu from 24.01.2022 to 31.01.2022.
3. Participated in **40 hour online Faculty Development Programme on “Recent trends in Wireless Communication**” Sponsored by Ministry of Electronics and Information Technology(MeitY) GoI, organized by E&ICT Academy , **NIT Warangal** and K.Ramakrishnan College of Engineering,Trichy,Tamilnadu during 05.08.2021 to 14.08.2021.
4. FDP on “**Perspective and challenges in outcome based research**” NIT, Trichy from 13.07.2020 to 17.07.2020.
5. **ATAL FDP** on “**Energy Engineering**” at Government College of Technology, Salem 23.11.2020 to 27.11.2020.
6. **NITTTR FDP** on “**8051 Microcontroller and its Applications**” organized by **NITTTR, Chennai** from 07.12.2020 to 11.12.2020.
7. Participated in one week faculty development programme on “**IoT with cloud Applications**” conducted by Electronics and ICT Academy ,**IIT Roorkee** at Sri Shakthi Institute of Engineering and Technology, Coimbatore from 10.02.2020 to 14.02.2020.
8. Workshop on “**National initiative for Technical Teachers Training**” Organized by **NITTTR** with at Sri Krishna College of Technology, Coimbatore 24.02.2020.
9. NITTTR FDP on “**Indian Electricity Rule and Code of Practices**” NITTTR, Kolkatta from 16.12.2019 to 20.12.2019.
10. Attended two days Workshop on “ **e-Yanthra - Introduction to Robotics**” organized by **IIT-Mumbai** at Saranathan Engg College , Trichy held on 15.11.19 to 16.11.2019.
11. **NITTTR FDP** on “**Embedded Systems and IoTs**” organized by **NITTTR, Chandigarh** at Kings College of Engg, Punalkulam held on 23.09.2019 to 27.09.2019.
12. **AICTE Sponsored** workshop on Multimedia Information Retrieval – Research Issues at M.A.M college of Engg, Trichy from 25.09.2017 to 26.09.2017.
13. **DST –SERB sponsored** Workshop on “**Modeling and simulation of Digital Image Processing**” at Gnanam College of Technology, Namakkal from 21.04.2017 to 22.04.2017.
14. Workshop on “**Wireless Sensor Networks**” organized by NIT, Trichy 06.12.2009.

PROGRAMMES ATTENDED- FDPS/STTP/SEMINARS/WORKSHOPS(OTHERS)

PROGRAMME	TITLE OF THE PROGRAMME(s)	INSTITUTION	DURATION
Seminar	AI for Teaching and Learning	The Internal Quality Assurance Cell, Dr.M.G.R.Educational and Research Institute	26.12.2024
FDP	Advances In 5G and Beyond: Exploring The Future of Wireless	St. Joseph's College Of Engineering And Technology Thanjavur	09.09.2024 to 13.09.2024
FDP	Outcome based Education	Kings College of Engineering, Punalkulam	27.08.2024
FDP	Education 5.0	Dr. M.G.R Educational And Research Institute Chennai.	15.05.2023 to 19.05.2023
WEBINAR	IoT Design Methodologies	Krishnasay College of Engg, Cuddalore.	19.11.2022
Workshop	Robotics: Theory and Applications	Mandsaur University,Madhya pradesh	08.07.2021
STTP	Mixed Signal Design Approaches For Artificial Intelligence Processors	Lakireddy College Of Engg,Ap,India	01.02.2021 to 06.02.2021
Webinar	MATLAB simulink and arduino	KNSK College Engineering	04.07.2020
Webinar	Your Mind - Your Master	Sri Eshwar College of Engineering	06.07.2020
Webinar	FPGA Design	Sathyabama institute of Science and Management	08.07.2020
Webinar	"Embedded and IoT Based Real Time Project Development using Arduino and MIT App Inventor"	St. Joseph's College of Engineering and Technology, Thanjavur	10.07.2020
FDP	"Modern IOT Technology Tools and Design for real time applications"	Sri Sairam Institute of Tech,Chennai	03.06.2020 to 09.06.2020
FDP	Python and Machine learning"	K.C.S Nadar College of Arts and Science	26.6.2020
Workshop	Hands on training for Machine learning using Python	Karunya Institute of Technology and sciences, Coimbatore	21.02.2020
Workshop	IoT Using Raspberry Pi	Kings College of Engineering, Punalkulam	19.11.2019

FDP	Research issues and solutions in sustainable energy conversion and renewable energy sources	Kings College of Engineering, Punalkulam	1.11.2019 to 02.11.2019
Workshop (IEEE)	Internet of things using Arduino & Raspberry Pi.	Kings College of Engineering, Punalkulam	20.03.2018
Seminar(IEEE)	Art of writing a paper	Kings College of Engineering, Punalkulam	29.01.2018
Workshop	Advancement in mobile App	Kings College of Engineering, Punalkulam	23.09.2017
Workshop	Soft computing techniques for renewable energy sources	Kings College of Engineering, Punalkulam	24.08.2017
FDP (6 days)	Embedded systems- For a Connected Tomorrow.	SASTRA University , Thanjavur	14.11.2016 to 19.11.2016
Workshop	Calibration of Electro Technical Instruments	Kings College of Engineering, Punalkulam	30.03.2016
Workshop (3 days)	Networking in MNC	Kings College of Engineering, Punalkulam	22.07.2015 to 24.07.2015
Workshop	Artificial intelligence and Expert system	Kings College of Engineering, Punalkulam	04.09.2014
Workshop	Open source SCILAB programming	SASTRA University , Thanjavur	30.08.2014
Workshop	Analog and Mixed signal IC Design	Sudharsan Engg College,Pudukkottai	11.02.2012

SWAYAM CERTIFICATIONS:

S.No	Course name	Remarks
1.	Biomedical Nanotechnology	Course Completed & Progress Received
2.	Computer Networks	Course Completed & Progress Received
3.	Microprocessor & Interfacing	Course Completed & Progress Received
4.	Electronic Waste Management	Course Completed & Progress Received
5.	Pedagogical Innovations And Research Methodology	Certificate Received
6.	Refresher Course On Teacher And Teaching In Higher Education	Certificate Received

INVITED LECTURES:

1. Delivered lecture on “**Electronic circuits –I**” in orientation program for II year on 02.07.2016 at Kings College of Engineering, Thanjavur.
2. Delivered lecture on “**Communication Theory**” in orientation program for II year on 02.01.2017 at Kings College of Engineering, Thanjavur.
3. Delivered lecture on “**Importance of communication in Disaster Management**” on 03.02.2018 Organized by ISTE staff chapter, Kings College of Engineering, Thanjavur.

ACADEMIC ACTIVITIES/RESPONSIBILITIES:

S.No	Academic Year	Sem	Contribution (Department Level)	Contribution (Institution Level)
1.	2024-25	ODD & EVEN	• Mentor-IV ECE	• Dy.COE (Autonomous) • Kings Staff welfare incharge • SAR- Incharge
2.	2023-24	ODD & EVEN	• DRM incharge • Mentor-III ECE	• Chief Coordinator of Examcell -KINGS EXAMCELL • Chief Superintendent-AU Exams • Kings Staff welfare incharge • SAR- Incharge
3.	2022-23	ODD & EVEN	• DRM incharge • Mentor-II ECE • Project Guide-UG	• Chief Coordinator of Examcell -KINGS EXAMCELL • Chief Superintendent-AU Exams • Kings Staff welfare incharge • SAR- Incharge
4.	2021-22	ODD & EVEN	• DRM incharge • Mentor-IV ECE	• Chief Coordinator of Examcell -KINGS EXAMCELL • Chief Superintendent-AU Exams • Kings Staff welfare incharge • SAR- Incharge
5.	2020-21	ODD & EVEN	• DRM incharge • Mentor-IV ECE	• Chief Coordinator of Examcell -KINGS EXAMCELL • Chief Superintendent-AU Exams • Kings Staff welfare incharge • SAR- Incharge
6.	2019-20	ODD & EVEN	• DRM incharge • Class Committee chairperson – II ECE • NCON ‘2020 Coordinator • Graduation Day Dept Incharge	• Kings Staff welfare incharge • ISO Coordinator • AU-Web portal entry incharge • SAR- Incharge

			Project Guide-UG and PG	
7.	2018-19	ODD & EVEN	- DRM incharge - Graduation Day Dept Incharge - Class Committee chairperson – II ECE - Project Guide-UG	ISO coordinator Staff Welfare association incharge
8.	2017-18	ODD & EVEN	- Class Coordinator Symposium Coordinator – E-blast 17 - DRM incharge - NAAC Coordinator - ISO Coordinator - Class Committee chairperson. - Project Guide-UG	- Stock Verification Coordinator - Acted as Anna University Representative (AUR) for university exam- November 2017
9.	2016-17	ODD & EVEN	- NAAC coordinator - Project Coordinator - Project Guide – UG & PG - Faculty Advisor - Committee member for symposium-e’blast 2016	Budget incharge for NAAC Assignment monitoring head
10.	2015-16	ODD & EVEN	- Class Coordinator- I YEAR (ODD & EVEN) - DRM incharge - Class Committee chairperson. - Project Guide – UG & PG - Faculty Advisor - Committee member for symposium-e’blast 2015	- Assignment monitoring head - Acted as Anna University Representative (AUR) for university exam-April 2016 No.of Admissions: 04
11.	2014-15	ODD & EVEN	- Project Coordinator - Project Guide – UG & PG - Faculty Advisor - FDP coordinator - Placement Coordinator - Department activities in charge - Kings Times Editorial Board member - Committee member for symposium-e’blast 2014	Seating Arrangement Convener for Sangamam -2015.
12.	2013-14	ODD	Class coordinator - III YEAR	Seating Arrangement

		& EVEN	(ODD & EVEN) • Symposium coordinator – E-blast 13 • FDP coordinator • Department activities In charge • Kings Times Editorial Board member • Optical and Microwave Lab Incharge. • Project Guide – UG & PG • Faculty Advisor	Convener for Sangamam - 2014. • Stage Decoration Convener for college day -2014. • Acted as Anna University Representative (AUR) for university exam-April 2014.
13.	2012-13	ODD & EVEN	• Class coordinator - III YEAR (ODD SEM) • Value Added Course Coordinator • Alumni coordinator • Project Guide – UG & PG • Faculty Advisor • Committee member for symposium-e'blast 2012 • Optical and Microwave Lab Incharge.	-
14.	2011-12	ODD & EVEN	• Class coordinator - IV YEAR (ODD & EVEN) • Value Added Course Coordinator –Organized value added course • Project Coordinator • Alumni coordinator • Project Guide – UG & PG • Faculty Advisor • Optical and Microwave Lab Incharge. • Committee member for symposium-e'blast 2011	-
15	2010-11	ODD & EVEN	• Class coordinator - IV YEAR (EVEN SEM) • Project Coordinator • Alumni coordinator • Accommodation committee member in TIES-2011. • Committee member for symposium-e'blast 2010 • Project Guide – UG & PG • Faculty Advisor	-
16	2009-10	ODD	• Class coordinator - IV YEAR	-

		& EVEN	• (ODD & EVEN) • Symposium coordinator - E blast 09 • Counseling Coordinator • Alumni Coordinator • Project Guide – UG • Faculty Advisor • Committee member for symposium-2009	
17	2006-07	ODD & EVEN	• Counseling Coordinator • Alumni Coordinator • Industrial Visit Coordinator - Organized Local Visit to ADHISAYAM, Madurai (Sponsored by Management) • Project Guide- UG • Faculty Advisor • Committee member for symposium-2006	•Deputy warden for Girls Hostel
18.	2005-06	ODD & EVEN	• Class coordinator - III YEAR • Counseling Coordinator • Alumni Coordinator • Industrial Visit Coordinator - Organized Industrial Visit to Bangalore for 4 days. • Arranged local visit to Rohini hospital, Thanjavur • Faculty Advisor • Project Guide- UG • Committee member for symposium-2005	•Deputy warden for Girls Hostel
19.	2004-05	ODD & EVEN	• Project Guide • Faculty Advisor	• Deputy warden for Girls Hostel

Google Scholar link:

<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://scholar.google.com/citations%3Fuser%3DQ7VdbJcAAAAJ%26hl%3Den&ved=2ahUKEwjWs8mRy8COAxWY1jgGHdfGCNcQFnoECBIOAQ&usg=AOvVaw3GNGXyLN1Z-IXKtJUFoyDI>