Dr.R.PONNI
 4th Cross, Cauvery nagar,
Madhakkottai road,
Thanjavur-613005
Email Id: ponnikings2021@gmail.com
9943325183

CURRICULUM VITAE

Working as an Assistant Professor in Kings College of Engineering, Punalkulam. More than 18 years of teaching experience at the Kings College of Engineering, Punalkulam,Thnajavur.Tamil Nadu, India. Published more than 9 papers in various reputed International journals. Received Grant-in-aid of Rs.7500 and worked for project funded by TNSCST, Chennai. Member in IEEE and ISTE. Research interests are in the broad areas of Wireless Sensor Networks , Machine Learning and biomedical instrumentation. Supervised 15 B.E and 5 M.E projects. Actively coordinated in many workshop/Seminars, National conference and other events.

EDUCATIONAL DETAILS:

(i)Ph.D.   Information & Communication, Anna University, Chennai, April 2024.

Title: Investigations on Energy Aware And Optimization Based Node Localization Scheme In Underwater Wireless Sensor Networks

(ii)PG :   M.E –Communication Systems , 2009, Mahendra Engineering College, Namakkal. - 8.48 CGPA

(iii)UG :   B.E Electronics and Communication Engineering (ECE), 2004, Anjalai Ammal Mahalinham Engineering College , Kovilvenni.- 79.4%

EMPLOYMENT HISTORY:

Lecturer : 22.07.2004 to 30.06.2007 and 01.07.2009 to 31.05.2010 Department of Electronics and Communication Engineering, Kings College of Engineering, Thanjavur

Assistant Professor: 01.06.2010 to Till date-Department of Electronics and Communication Engineering, Kings College Engineering, Thanjavur

AREAS OF RESEARCH:

1. Wireless Sensor Networks
2. Machine Learning
3. Biomedical

SOFTWARE TOOLS KNOWN:

Computing Tools: MATLAB

MEMBERSHIP IN PROFESSIONAL BODIES:

- Institute of Electrical & Electronics Engineers (IEEE) and ISTE

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 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 Gazatte 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, Kanishkaharini, 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 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.

2. 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's College of Engineering and Technology on 23rd March 2018.

3. 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.

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 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.

Grant-In-Aid Received:

1. Received Grant of Rs. 7,500/- from TNSCST, Chennai.

Invited Lectures:

1. Delivered lecture on "**Importance of communication in Disaster Management** "on 03.02.18 Organized by ISTE staff chapter, Kings College of Engineering, Thanjavur.

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

Conferences Organized:

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

Awards received:

1. Participated in **Science City Project Expo-2018** and won third prize with cash award. (21.02.2018-24.02.2018)

ORGANIZED – ANNA UNIVERSITY /NITTTR/INTERNATIONAL WEBINAR

1. Organized **Anna University** Approved Seven days Faculty Development Programme on **"Electronic Circuits –II" from** 8.12.2014 to15.12.2014**.(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)**

Other Seminar / Workshops Organized

S.No	Name of the Programme	Duration
1.	Organized webinar on" **Enabling Technologies for 5G Communication**".	20.05.2022
2.	Organized webinar on" **Overview of machine learning, Deep learning and natural language processing using python**".	27.05.2020
3.	Organized webinar on" **Agile Methodologies**".	01.06.2020
4	Organized symposium **e-blast 2017**.	01.09.2017
5	Arranged local visit to KG Hospital to learn on "**Medical Electronics".**	13.02.2018
6	Delivered lecture on "**Electronic circuits -I** " in orientation program for II year.	02.07.2016
7	Delivered lecture on "**Communication Theory** " in orientation program for II year.	02.01.2017
8	Organized guest lecture on "**VLSI Design & Sequential Circuits**" Organized project Expo'2015.	23.01.2015
9	Organized symposium **e-blast 2013**.	14.09.2013
10	Organized workshop on "**FPGA Design and VHDL Programming**"	07.03.14-8.03.14
11	Organized value added course on "**Embedded systems**".	5 DAYS -2012
12	Organized value added course on **CCNA** for IV year.	20 DAYS-2011
13	Organized symposium **e-blast 2009**.	08.09.2009
14	Organized **Industrial Visit** to Kerala for 4 days.	2009
15	Organized **Industria**l **Visit** to Bangalore for 5 days.	2007
16	Organized **Local Visit** to **ADHISAYAM,Madurai** (Sponsored by Management).	2007
17	Organized **Industrial Visit** to Bangalore-**BEL** for 4 days.	2006
18	Arranged local visit to ROHINI Hospital to learn about "**Medical Electronics".**	2006

Programmes attended- FDP/STTP/SEMINAR/WORKSHOP			
PROGRAMME	**TITLE OF THE PROGRAMME**	**INSTITUTION**	**DURATION**
INTERNSHIP	Machine learning Unleased :Harnessing the potential of AI for innovation and growth	Marcello Tech,Trichy	17.05.2024-23.05.2024
FDP	Education 5.0	Dr. M.G.R Educational And Research Institute Chennai	15.05.2023-19.05.2023
WEBINAR	Iot Design Methodologies	Krishnasay College Of Engg,Cuddalore	19.11.2022
FDP	Wireless Communication	Thiagarajar College of Engineering, Madurai, Tamilnadu	24.01.2022 to 31.01.2022
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	01.02.2021-06.02.2021
ATAL FDP	Energy Engineering	GCT,Salem	23.11.20 -27.11.20
FDP	Perspective and challenges in outcome based research	NIT,Trichy	13.07.2020-17.07.2020
NITTTR	8051 Microcontroller and its Applications	NITTTR ,Chennai	07.12.2020 to 11.12.2020
Webinar	MATLAB simulink and arduino	KNSKCE	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.	10.07.2020
FDP	"Modern IOT Technology Tools and Design for real time applications"	Sri Sairam Institute of Technology	03.06.2020 to 09.06.2020
FDP	Python and Machine learning" organizedby	K.C.S Nadar College of Arts and Science	26.6.2020
FDP	Attended webinar on"Perspective and Challenges in outcome based Research" organized by NIT,Trichy	ICT ACADEMY IIT,Roorkee Sri Shakthi Institute of Engineering & Technology,Coimbatore	13.07.2020 To 17.07.20
Workshop	Hands on training for Machine learning using Phython	Karunya Institute of Technology and sciences,Coimbatore	21.02.2020
Workshop	National initiative for Technical Teachers Training	NITTTR with at Sri Krishna College of Technology,Coimbatore	24.02.2020
Workshop	IoT Using Raspberry Pi	Kings college of engg ,Punalkulam	19.11.2019
FDP	Research issues and solutions in sustainable energy conversion and renewable energy sources	Kings college of engg ,Punalkulam	1.11.2019-02.11.2019
Workshop	Introduction to Robotics	IIT,Bombay at Saranathan College of Engineering,Trichy	15.11.2019-16.11.2019
STTP	Indian Electricity Rule and Code of Practices	NITTTR,Kolkatta	16.12.2019-20.12.2019
Workshop(IEEE)	Internet of things using Arduino & Raspberry Pi.	KCE	20.3.18
Seminar(IEEE)	Art of writing a paper.	KCE	29.01.18

Workshop (2 Days AICTE Sponsored)	Multimedia Information Retrieval – Research Issues.	M.A.M , Trichy	25.09.17 - 26.09.17
Workshop	Advancement in mobile App	KCE	23.09.17
Workshop	Soft computing techniques for renewable energy sources	KCE	24.08.17
Workshop (2 days DST – SERB sponsored)	Modeling and simulation of Digital Image Processing	GCT, Namakkal	21.04.17 - 22.04.17
FDP (6 days)	Embedded systems- For a Connected Tomorrow.	SASTRA, Thanjavur	14.11.16 - 19.11.16
Workshop	Calibration of Electro Technical Instruments	KCE	30.03.16
Workshop (3 days)	Networking in MNC	KCE	22.07.15 - 24.07.15
Workshop	Artificial intelligence and Expert system	KCE	04.09.14
Workshop	Open source SCILAB programming	SASTRA, Thanjavur	30.08.14
Workshop	Analog and Mixed signal IC Design	Sudharsan Engg College,Pudukkottai	11.02.12
Workshop	Wireless Sensor networks	NIT,Trichy	06.12.09

OTHER ACADEMIC ACTIVITIES/RESPONSIBILITIES:

S.No	ACADEMIC YEAR	SEM	Contribution (Department level)	Contribution (Institution level)
1.	**2023-24**	**ODD & EVEN**	• DRM incharge • Me**ntor-III ECE**	• **Chief Coordinator of Examcell** -KINGS EXAMCELL • **Chief Superintendent**-AU Exams • Kings **Staff welfare incharge** • **SAR**- Incharge
2.	**2022-23**	**ODD & EVEN**	• DRM incharge • Me**ntor-II ECE** • Project Guide-UG	• **Chief Coordinator of Examcell** -KINGS EXAMCELL • **Chief Superintendent**-AU Exams • Kings **Staff welfare incharge** • **SAR**- Incharge
3.	**2021-22**	**ODD & EVEN**	• DRM incharge • Me**ntor-II ECE**	• **Chief Coordinator of Examcell** -KINGS EXAMCELL • **Chief Superintendent**-AU Exams • Kings **Staff welfare incharge** • **SAR**- Incharge
4.	**2020-21**	**ODD & EVEN**	• DRM incharge • Me**ntor-IV ECE**	• **Chief Coordinator of Examcell** -KINGS EXAMCELL • **Chief Superintendent**-AU Exams • Kings **Staff welfare incharge** • **SAR**- Incharge
5.	**2019-20**	**ODD & EVEN**	• DRM incharge • Class Committee chairperson – II ECE • **NCON '2020 Coordinator** • Graduation Day Dept Incharge • Project Guide	• Kings **Staff welfare** incharge • **ISO** Coordinator • Webportal entry incharge

6.	**2018-19**	**ODD & EVEN**	• DRM incharge • Graduation Day Dept Incharge • Class Committee chairperson – II ECE • Project Guide-UG	• **ISO** coordinator • **Staff Welfare** association incharge
7.	**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
8.	**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
9.	**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**
10.	**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 - 15.**
11.	**2013-14**	**ODD & EVEN**	• Class coordinator - III YEAR (ODD & EVEN) • **Symposium coordinator – E-blast 13** • FDP coordinator	• Seating Arrangement Convener for **Sangamam -14.** • Stage Decoration Convener for college day

				-2014. • Acted as **Anna University Representative** (AUR) for university exam-April 2014.
12.	**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.	-
13.	**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**	-
14.	**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	-
15	**2009-10**	**ODD & EVEN**	• Class coordinator - IV YEAR • (ODD & EVEN) • **Symposium coordinator** - E blast 09 • Counseling Coordinator	-

The first cell group (row 11 continuation):
• Department activities In charge
• Kings Times Editorial Board member
• **Optical and Microwave** Lab Incharge.
• Project Guide – UG & PG
• Faculty Advisor

			• Alumni Coordinator • Project Guide – UG • Faculty Advisor • Committee member for symposium-**2009**	
16	**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
17	**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
18	**2004-05**	**ODD & EVEN**	• Project Guide • Faculty Advisor	• Deputy warden for Girls Hostel

Anna university exams related work:

1.Internal/External examiner for evaluation/assessment of theory / practical answer scripts (2005 onwards).

2.Acted as **Anna University Representative** (AUR) for Anna university exams.

3.Acted as **Chief Superintendent** for Anna university Exams.