Department of Electronics and Communication Engineering

UCE- BIT Campus Tiruchirappalli-24

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Mrs: R.Jayarani

Assistant Professor

> Research Area: Control System, Signal Processing

> Educational Qualifications:

Qualification	Department	Year (From -To)	Percentage	Class
BE	ECE	1994-98	64.2	First
ME	Process control and Instrumentation Engg.	2002-04	7.97(CGPA)	First
Ph.D	Electrical	2017	Pursuing	

> Experience:

Name of Company / Institutions	Designation of Post	From	То	Relived on	Experience in Year
Jayam College of Engg & Tech, Dharmapuri	Lecturer	24-07-2004	31-05-2007	31-05-2007	2.11
Mookambigai college of engineering, Pudukkottai	Lecturer	27-07-2007	19-08-2008	19-08-2008	1.2
Anna university BIT Campus Trichy	Lecturer	20-08-2008	18-08-2009	18-08-2009	1
Anna university BIT Campus Trichy	Asst. Professor	19-08-2009	Till date		14.1

> Awards: NIL

> Additional / Academic Responsibilities at University:

- 1. Certificate distribution committee member of ECE students in the Graduation day celebration in the year of 2014, 2015, 2016 and 2017.
- 2. Member of Affiliation Inspection Committee.
- 3. Internal & External Examiner for university practical examination conducted by the Anna University.
- 4. Question paper setter for university practical & theory examination conducted by the Anna University.
- 5. Hall superintendent for university examination.
- 6. Member of Squad for university theory examination conducted by the Anna University.
- 7. Member of Anna University Representative (AUR) for university theory examination conducted by the Anna University Trichy.

> Professional Activities:

1. **Class Coordinator**: 2007-2011 Batch students

2011-2015 Batch students

2015-2019 Batch students

- 2. Assessment Test Coordinator: August 2008 to June 2012
- 3. **Student Councilor**: 15 Students
- 4. **TEQIP Coordinator**: 2013 to till date.
- 5. **Faculty in-charge**: (i) Digital Signal Processing Laboratory from the year of 2008 to till date (ii) Basic Circuits Laboratory from 2010-2014.
- 6. **Instrumental** in the purchase of laboratory equipments towards the establishment of Digital Signal Processing Laboratory and Optical Communication Laboratory during 2008-09.
- 7. **Purchased Multisim** software for Electronic Circuits laboratory in 2011 and **MATLAB** software for Digital Signal Processing Laboratory in 2013
- 8. **Module coordinator** for NBA
- 9. **In-charge** of Criterion –I for NBA process

- 10.Acted as **Session Chair** in two days International Conference on "Advancement in Computing and Communication Technologies", organized by Dept. of MCA Anna University BIT Campus Trichy during 10th-11th April 2015.
- 11.**Delivered** a Guest lecture on "Digital Signal Processing" for the dept. of EEE, Ganadipathi Tulsi's Jain Engineering College, Vellore during 9th-10th May 2016.
- 12.**Presented** a lecture on Criterion –I of NBA at dept. of ECE Anna university BIT campus Trichy.

> Membership of Scientific and Professional Societies:

Life Member of the Institution of Engineers (India) No: M-1564964

> Fellowships and Grants:

- 1. Conference Grant
 - Name: Nascent Technologies in Signal Processing and Communication
 - ➤ Date & Duration: 17th & 18th March 2011(2 Days)
 - ➤ Role: Organizer
 - > Agency : **CSIR**
 - > Amount: Rs.25,000/-
- 2. FDP
 - Name: Nascent Technologies in Signal Processing
 - ➤ Date & Duration: 11th & 17th December 2013(7 Days)
 - > Role: Organizer
 - > Agency : **TEQIP-II**
 - > Amount: Rs.1,00,000/-
- 3. Conference
 - Name: Nascent Technologies in Signal Processing and Communication
 - ➤ Date & Duration: 27th & 28th November 2014(2 Days)
 - ➤ Role: Organizer
 - > Agency : **TEQIP-II**
 - > Amount: Rs.1,00,000/-
- 4. Workshop
 - Name: VLSI Design using Cadence Tool
 - ➤ Date & Duration: 25th & 26nd February 2016(2 Days)
 - > Role: Organizer
 - > Agency : **TEQIP-II**
 - > Amount: Rs.50,000/-
- 5. Conference

Name: Nascent technologies in Signal Processing and Communication

➤ Date & Duration: 1st & 2nd September 2016(2 Days)

Role: Organizer
Agency: **TEQIP-II**Amount: Rs.1,00,000/-

> Completed B.E/M.E Projects:

a. Number of ME Projects Completed: 3

b. Number of BE Project Completed: 20

> PhD Research Projects (Completed): NIL

> PhD Research Projects (Ongoing): NIL

> Sponsored Research Activities:

*** Fuzzy based Water Saving System using Wireless Sensor Network***

Duration: 6 Month Role: Supervisor Agency: **TEQIP**

Amount: Rs.10, 000/-

> Consultancy Activities: NIL

List of Seminar / Short Term Course /FDP/ Workshop attended: (Within India)

- 1. SDP (2006), "AICTE Sponsored Staff Development Program on Mobile Computing", organized by KSR College of Technology Tiruchengode during 13-07-2006 to 24-07-2006(12 Days).
- 2. FDP (2006), "AICTE Sponsored Staff Development Program on VLSI Signal Processing", organized by Muthayammal Engineering College Rasipuram during 20-11-2006 to 01-12-2006(12 Days).
- 3. Workshop (2010), "Two Days Workshop on Networking Simulator Tools", organized by dept. of ECE BIT Campus Trichy during 17-07-2010 to 18-07-2010(2 Days).
- 4. Seminar (2010), "Speech Processing and its Applications", organized by dept.of ECE BIT Campus Trichy during 23-07-2010 to 24-07-2010. (2 Days)

- 5. Seminar (2010), "Software Defined Radio", organized by Dept. of ECE Oxford Engineering College Trichy during 27-08-2010 to 28-08-2010. (2 Days)
- 6. Workshop (2010), "National Level Workshop on Discrete Event Simulation for Protocol Design in Wireless Networks" organized by Anna University BIT Campus Trichy on 22-12-2010(1 Day).
- 7. Training (2011), "Train the Trainers-2011", organized by Dept. of English Anna University BIT Campus Trichy on 08-01-2011 (1 Day).
- 8. Seminar (2011), "Design Issus and Research Challenges of OFDM in Wireless Network", organized by Dept. of ECE BIT Campus Trichy during 04-02-2011 to 05-02-2011. (2 Days)
- 9. Workshop (2011), "IETE and CSIR sponsored National workshop on Signal Processing for Biomedical Application" organized by the dept. of ECE and Amrita biomedical engineering research center during 14-12-2011 to 17-12-2011(4 Days).
- 10. Orientation program(2012), "77th Orientation Program", organized by Bharathidasan University Trichy during 15-11-2012 to 12-12-2012(28 Days)
- 11.FDP (2013), "Faculty Development Training Programme for TEQIP-II Institutions on Signals and Systems", organized by Anna University Chennai during 15-07-2013 to 19-07-2013(5 Days).
- 12. Workshop (2014), "Two Days National Workshop on System Design using LABVIEW", organized by Dept. of ECE Anna University BIT Campus Trichy during 13-03-2014 to 14-03-2014(2Days).
- 13. Workshop (2014), "ISTE sponsored two week workshop on computer networking", organized by IIT Bombay during 28-05-2014 to 05-07-2014(39 Days)
- 14.FDP (2015), "Emerging Trends in Mathematical Modeling and Simulation", organized by dept. of Maths BIT Campus Trichy during 08-05-2015 to 14-05-2015. (7 Days)
- 15.FDP (2015), "TEQIP-II sponsored FDP on role of renewable energy in Indian power sector", organized by Dept. of EEE Anna University Trichy during 21-09-2015 to 27-09-2015(7 Days)

16. Training program (2016), "DST sponsored training program on Big Data Analytics", organized by dept. of MCA Anna university trichy during 14-07-2016 to 23-07-2016(10 Days).

17. Workshop (2017), "IoT-LORa", organized by Dept. of ECE Anna University BIT Campus Trichy during 01-09-2017 to 02-09-2017(2Days).

18. Workshop (2017), "Asana and breathing Exercise", organized by dept. of Physical Education, Anna University BIT Campus Trichy on 07-02-2018(1Day).

19. Symposium (2018), "Impedance Measurement, IOT Devices Measurement, RF Design and Simulation and Material Measurement", organized by Keysight Technologies on 20-04-2018(1 Day).

> International Conferences Participated: NIL

> Publications:

a. Books:

➤ Editor for proceedings of **CSIR** sponsored National conference on Nascent Technologies in Signal Processing and Communication, organized by dept of ECE Anna university BIT Campus Trichy during 17-03-2011 to 18-03-2011(2 Days)

➤ Editor for proceedings of **TEQIP-II** sponsored National conference on Nascent Technologies in Signal Processing and Communication, organized by dept of ECE Anna university BIT Campus Trichy during 27-11-2014 to 28-11-2014(2 Days)

➤ Editor for proceedings of **TEQIP-II** sponsored National conference on Nascent Technologies in Signal Processing and Communication, organized by dept of ECE Anna university BIT Campus Trichy during 01-09-2016 to 02-09-2016(2 Days),ISBN:978-93-80622-16-3

b. International Journals: NIL

c. National Journals: NIL

Conferences

a. International Conferences:

- 1. **R.Jayarani**, K.Kavitha Devi, T.Chithra (2012), "Secret Communication based on Double compression scheme", International Conference on VLSI and Signal Processing during 4-5 May 2012, pp 255-258 at Bangalore.
- R.Jayarani, R.Sowmyalakshmi, S.Kulasekarapandian, R.Nandhitha (2016), "Fuzzy based water saving system using WSN", TEQIP-II sponsored International conference on Emerging trends in Electrical Electronics and communications systems organized by dept. of ECE & EEE, Anna university BIT campus Trichy during 23-10-2016 to 25-10-2016 (3 Days)pp.15-19, ISBN:819211289-6.
- 3. R.Sowmyalakshmi, S.M Girirajkumar, **R.Jayarani**, S.Parameswari(2016), "Significant interclass feature vectors for Ear Biometrics", TEQIP-II sponsored International conference on Emerging trends in Electrical Electronics and communications systems organized by dept. of ECE & EEE, Anna university BIT campus Trichy during 23-10-2016 to 25-10-2016(3 Days)pp. 135-139,ISBN:819211289-6.

b. National Conferences:

- 1. **R.Jayarani**, T.Chithra (2012), "Computer Aided segmentation of human airway tree using differential geometric approach", National Conference on ETPECS.
- R.Sowmyalakshmi, M.R.Anandha Padmanaban, R.Jayarani R.Sreevashini(2016), "A comprehensive overview of welding defects detection using image processing techniques", TEQIP-II sponsored National conference on Nascent technologies in signal processing and communication, organized by dept of ECE Anna university BIT Campus Trichy during 01-09-2016 to 02-09-2016(2 Days) pp.149-152, ISBN:978-93-80622-16-3.
- 3. **R.Jayarani**, R.Kanmani, M.Kiruthika (2018), "Control of Mobile Two Wheeled Inverted Pendulum using type-2 Fuzzy logic", National conference

on Alternate Technologies for Energy , organized by dept. of EEE , Govt. College of Technology Coimbatore on 27-04-2018.