



**Dr. K. Jayanthi**  
**B.Tech., M.Tech., Ph.D., MISTE**  
**ASSOCIATE PROFESSOR**

1 Introduction:

Dr. K.Jayanthi is currently serving as Associate Professor in the department of ECE.

2. Educational Profile:

B.E (ECE), M.Tech( ECE), Ph.D, MISTE

3. Experience (Teaching and Industrial)

Teaching: 14 years and 2 months

4. Research Guidance (No. of Scholars and research area)

No. Of research Scholars: 5 Nos.

Thrust Areas: Cellular mobile networks, MIMO –OFDM systems, Mobile health care Provisioning.

5. Publication details (List of all publications in Journals, Conferences and Books)

**Journals:**

1. **K.Jayanthi** ,K.Thenmozhi and P.Dananjayan, Traffic Enforcement Mechanism in ATM using neural network”, **IETE Technical Review**, vol 21, no.4, , pp.241-246, July- August 2004.( ISSN No. 0256-4602).
2. **K.Jayanthi** and P.Dananjayan “Prediction Based Smart Scheduler Using Neural Network for Wireless Networks”, **AMSE Journal on Signal Processing and Pattern Recognition Advances B**, France, vol 49, no.3, pp.13-24, 2006 (ISSN No. 0021-8936).

3. **K.Jayanthi**, K.Varadharajan, A.Arunkumar and P.Dananjayan, "Performance Enhancement Using Opportunistic Schedulers in Wireless Networks"**IETE, Journal of research - Special issue on "Protocols for resource, link and mobility management for wireless and Satellite communication Networks"**, vol.52, nos.2 and 3, pp.207-213 March-June 2006 (ISSN No. 0377-2063).
4. **K.Jayanthi** and P.Dananjayan, "Multimedia QoS Provisioning using Opportunistic Scheduling in TDMA/ CDMA Networks", **Int. J. Mobile Network Design and Innovation**, Inderscience Publishers, Vol.1, No.3/4, pp. 248-257, January 2006 (ISSN No. 1744-2869)
5. **K.Jayanthi** and P.Dananjayan, "A novel link adaptation scheme for wideband CDMA systems", **ICFAI University Journal of Telecommunications**, Vol.1, No.1, pp.20-36, August 2009.
6. **K.Jayanthi** and Sudha Nancy, "Chaotic code optimization for interference reduction in DS-CDMA systems", **International Journal of computer sciences and Engineering systems**, vol.4, no.1, pp.1-6, January 2010. (ISSN: 0973-4406)
7. Kumaratharan.N, **Jayanthi.K** and Dananjayan.P, "Performance Enhancement of MC-CDMA System through STTC based STBC Site Diversity", International Journal of Computer Science and Information Technologies, vol.1, no.2, pp.86-92, 2010. (ISSN: 09759646)
8. **K.Jayanthi** and P.Dananjayan, "Improving antijamming characteristics of spread spectrum communication systems", **Special issue on context awareness and self managing systems - International Journal of Autonomous and adaptive communication systems**, , vol. 5, No.1, pp.77-87, 2012. (ISSN.1744-2869)
9. **K.Jayanthi** and P.Dananjayan, "Channel Estimation for multi-user MIMO-OFDM system" **ICFAI University Journal of Telecommunications**, vol. II, No. 4, Nov. 2010
10. **K.Jayanthi** and Sudha Nancy, "Chaotic code optimization for interference reduction in DS-CDMA systems", *International Journal of computer sciences and Engineering systems*, vol.4, no.3, pp.191-195, July 2010. (ISSN: 0973-4406).

11. PillaJagadeesh and **K. Jayanthi**, “A Novel resolution Enhancement scheme based on edge directed interpolation using DT-CWT for satellite Imaging applications”, *International Journal of communication and Information Technology (IJCIT)*, Vol.2, No. 1, June 2011. ( ISSN: 2218-5224 ).ISSN 2078-5828 (PRINT), ISSN 2218-5224 (ONLINE), MANUSCRIPT CODE: 110710
12. S.Kalaimaniand **K.Jayanthi**, “Spectral Entropy Based VAD Using Teager Energy Operator And HOS, **International Journal Of Electronics Circuits And Systems**, Vol. 1,issue no. 1, pp. 17-22, February 2012.
13. Thilagam.K and **Jayanthi.K**, “Analytical Evaluation of a Hybrid Chaotic Shift Keying [CS-CSK] in a CDMA System”, *International Journal of Computer Applications (IJCA)*, Volume 54– No.15, September 2012.
14. B.Shoba and K.Jayanthi, “Performance Improvement of MIMO OFDM systems through channel estimation”, *International Journal of Wireless & Mobile Networks*, Vol. 4,No. 5, pp.49-59,October 2012
15. Thilagam.K and **Jayanthi.K**, “Multiuser BER Analysis of CS-QCSK Modulation Scheme In A Cellular System”, *International Journal of Wireless & Mobile Networks (IJWMN)*, Vol. 4, No. 6, December 2012
16. **K.Jayanthi**, Subash.c, Venketesh, Reduced Link Failures through Autonomous Reconfiguration System for Wireless Mesh Networks, Vol.2, No.2, pp.288-292, Feb 2013.
17. Thilagam.K and **Jayanthi.K**, “ A Novel Chaotic Modulation Scheme in a Cooperative Relaying System”, *International Journal of Computer Applications (IJCA)*, Volume 76– No.9, August 2013
18. Thilagam.K and **Jayanthi.K**, “A Low Complex Modified Golden Code In A Cooperative Relaying System”, accepted by *International Journal of Computer Networks & Communications (IJCNC)*, Vol.5, No.7, June 2014.

### **International Conferences:**

1. **K.Jayanthi** and P.Dananjayan,” Optimal resource utilization for real-time MPEG over ATM network”, Proceedings of IEEE TENCON2003 Bangalore, October 2003.
2. **K.Jayanthi** and P.Dananjayan, “QoS provisioning in Wireless networks using opportunistic Scheduling, Proceedings of IEEE International Conference on multidisciplinary aspects of Engineering and Technology, (IMAE 05), Bombay January 2005.
3. **K.Jayanthi** and P.Dananjayan, “Performance Improvement Using Opportunistic Scheduler in CDMA Systems”, Proceedings of International Union of Radio Science, URSI, New Delhi, October 2005.
4. **K.Jayanthi** and P.Dananjayan,” Performance Improvement in High capacity mobile Network using Call Admission Control Scheme”, Proceedings of International Union of Radio Science, URSI, New Delhi, October 2005.
5. **K.Jayanthi** and P.Dananjayan, “A Predictive multimedia CAC for prioritised handovers in wireless mobile networks”, Proceedings of IEEE International conference on communications and International conference on networking” (MICC-ICON 2005), Malaysia, Kulalampur, November 2005.  
(IEEE Catalog No. 05EX1235C ISBW: 1-4244-0001-5)
6. **K.Jayanthi** and P.Dananjayan, “A link adaptive Power control scheme for wideband CDMA system”, Proceedings of IEEE International conference on communications and International conference on networking” (MICC-ICON 2005), Malaysia, Kulalampur, November 2005.  
(IEEE Catalog No. 05EX1235C ISBW: 1-4244-0001-5)
7. **K.Jayanthi** and P.Dananjayan, “Mobility predictive call admission control for wireless multimedia services”, Proceedings of IEEE Wireless and Optical communication Networks (WOCN 2006),Banglore, April 2006.  
(IEEE Catalog No. 06EX1360C ISBW: 1-4244-0340-5)
8. **K.Jayanthi** and P.Dananjayan, “Integrated QoS framework for maximizing throughput in cellular mobile networks”,Proceedings ofIEEE Wireless and Optical communication Networks (WOCN 2006), Bangalore, April 2006.

9. N.Tamilarasan, **K.Jayanthi** and P.Dananjayan, “ Mobility based call admission control for CDMA Systems supporting integrated voice/ data, *Proceedings of IEEE International conference on computational intelligence and applications (ICCIMA'07)*, vol. IV, pp.240-246, December 2007.
10. PillaJagadeesh **and K. Jayanthi**, “Image Resolution Enhancement based on Edge Directed Interpolation using Dual Tree – Complex Wavelet Transform”, *Proceedings of Intl. conference on recent Trends in Information Technology, organized by IEEE Madras section and MIT campus, Anna University, Chennai, June 3-5, 2011*
11. ThamaraiSelvi **and K. Jayanthi**, “Efficient Speech Enhancement Technique By Exploiting The Harmonic Structure Of Voiced Segments”, *proceedings of Intl. conference on recent Trends in Information Technology, organized by IEEE Madras section and MIT campus, Anna University, Chennai, June 3-5, 2011*
12. Bhooma g, Kokila S, **Jayanthi K**,Jagadeesh Kumar V,” A Digital Instrument for Venous Muscle pump Test”, *Proceedings of 2011 IEEE International Instrumentation and measurement Technology conference*, pp. 466-469,China, May 2011.
13. Thilagam.K and Jayanthi.K, “A Novel chaos based modulation scheme (CS-QCSK) with improved BER Performance”, *CS&IT-Computer Science Conference Proceedings, CoNeCo*, pp-45-59,October 2012
14. Thilagam.K and Jayanthi.K, “Modified Golden Codes for Improved Error Rates through Low Complex Sphere Decoder” *CS&IT-Computer Science Conference Proceedings, WiMoA*, pp-211-221, May 2013

#### **National Conferences:**

15. **K.Jayanthi** and V.Puviarasi, "Echo Suppression in ATM over PSTN Networks”,*Proceedings of National conference on signals, systems & security, organized by PSG college of Technology, Coimbatore, March 2002.*
16. **K.Jayanthi** and P.Dananjayan,“Smooth Play out Mechanism for realtime Traffic over Wireless Networks”, *Proceedings of National conference on Emerging trends in Communication and Networks, AECOVISION-2003, Arunai Engineering College, Thiruvannamalai,December 2003.*

17. **K.Jayanthi** , G.F. Sudha and P. Dananjayan, “GFR - A New Service Category to Support TCP Traffic over ATM”, Proceedings of National Conference on Communication, NCC 2004, IISC, Bangalore, Jan 2004.
18. **K.Jayanthi** and P. Dananjayan, ”A Novel CAC Scheme for Heterogeneous Services in Cellular Mobile Networks”, Proceedings of National Conference on Communications, NCC 2005, IIT Kharagpur, January 2005
19. **K.Jayanthi** and Shyamala, “Performance improvement of OFDM using MIMO techniques”, Proceedings of National Conference on communication, Anna university, Coimbatore, 2009.
20. **K.Jayanthi** and Ramya, “Analysis of baseline wander effects in Optical wireless communication systems”, Proceedings of National Conference on communication, Anna university, Coimbatore, 2009.

#### 6. Courses Attended (STTPs, FDPs, Workshop, Training etc.,)

	S.No.	Organizer	Title	Period	Duration
STTP (Technical)	1.	Pondicherry Engineering College, Electronics and Instrumentation Engineering Department	Recent Trends in Process Automation	30.04.2007 To 13.05.2007	2 Weeks
	2.	Mailam Engineering College, Department of Electronics and Communication Engineering	Emerging Trends in Embedded and Wireless Technology	19.03.2007 To 23.03.2007	5 days
	3.	Pondicherry Engineering College, Computer Science and Engineering Department	Trends in Parallel and Distributed Architectures	16.11.2009 To 27.11.2009	2 Weeks
	4.	Pondicherry Engineering College, Computer Science and Engineering Department	Recent Trends in Information Security	29.11.2010 To 10.12.2010	11 days
	5.	Pondicherry Engineering College, Department of Physics	Nano Engineering Materials	13.12.2010 To 23.12.2010	10 days

STTP (Technical)	6.	Pondicherry Engineering College, Computer Science and Engineering Department	Design of Embedded Systems- Issues and Challenges	16.04.2012 To 27.04.2012	2 Weeks
	7.	Department of CSE, PEC, Puducherry	AICTE sponsored SDP on “Design of Embedded Systems- Issues and Challenges”	(16 <sup>th</sup> to 27 <sup>th</sup> April 2012)	Two weeks
	8.	Department of EEE, PEC, Puducherry	TEQIP sponsored FDP on “Emphasis on smart operation and Control of Power Markets using Power Electronic Components”	(19 <sup>th</sup> to 23 <sup>rd</sup> Nov. 2012)	One week
	9.	Department of ECE, PEC, Puducherry	AICTE sponsored FDP on “Security in Wireless heterogeneous Networks – Issues and Challenges”	(15 <sup>th</sup> to 26 <sup>th</sup> April 2013)	Two weeks
	10.	Department of CSE, PEC, Puducherry	AICTE sponsored FDP on Advances in Software Architecture, Engineering, Modelling Tools and Programming Practices	(27 <sup>th</sup> May to 7 <sup>th</sup> June 2013)	Two weeks

	11	Department of EIE, PEC, Puducherry	TEQIP sponsored FDP on Workshop on Tuning and Closed loop Control of Process	(21 <sup>st</sup> to 25 <sup>th</sup> Oct. 2013)	One week
Workshops	Pondicherry Engineering College <ul style="list-style-type: none"> <li>• Four Day Intensive Hands-On Faculty Training Programme on Embedded System Processors- 29<sup>th</sup> July to 1<sup>st</sup> Aug 2010</li> <li>• One day Workshop on Network Simulator – 14<sup>th</sup> Dec 2009</li> </ul> Indian Institute of Technology, Madras <ul style="list-style-type: none"> <li>• <b>Two days Professor summit</b> on "Embedded System Design Using Atmel 8-bit and 32-bitMCU" – 03.05.2012 to 04.05.2012</li> </ul>				
Soft Skills	<ul style="list-style-type: none"> <li>• Madras Academy for Excellence, Chennai. 1 Week programme – Batch :M175</li> <li>• Campus Connect programme Organized by Infosys, Chennai. 3 days from 4<sup>th</sup> Feb to 6<sup>th</sup> Feb 2009.</li> </ul>				

### 7. Expert Lectures delivered

S.No	Position held	Name of the EVENT	organization ( Visited)	Month & year
1.	JURY	students' technical symposium	V.R.S. college of Engineering, Villupuram	Sept. 2008
2.	Conference Chair	International Conference on Recent trends in communication	Thanthaiperiyar Government college of Engg., Vellore	Jan 2009.
3.	Speaker	special lecture on Spread Spectrum Techniques	Pavai Engineering College, Pachal, Namakkal,	sept.2009
4.	Speaker	Guest lecture on Communication systems	Christ Engineering College, Reddiarpalayam, Pondicherry,	Dec.2009.
5.	Speaker	Special lecture for PG / research students on Mobility	Sri Sairam Engineering College, Chennai	Aug 2010



		management in PCS networks		
6.	Speaker	Guest lecture on Wireless Communications	K.S.R. College of Engineering, Thiruchengode	Sept. 2010
19.	Jury	Students' Technical Symposium	IFET College of Engineering, Villupuram	13 <sup>th</sup> Jan 2011
20.	Speaker	Special seminar on An Insight on Spread spectrum Communications	Sri Akshaya College of Engineering and technology, Coimbatore	June 2011
21.	Advisory Committee Member	National Conference on Advanced communication and Computing techniques	Sri Sairam Engineering College, Chennai.	28 <sup>th</sup> -29 <sup>th</sup> April 2011
22.	Technical Review Committee Member	International conference on computer communication and electrical Technology	National College of Engineering, Thirunelveli.	18 <sup>th</sup> -19 <sup>th</sup> March 2011
23.	Jury for Paper Presentation Event	National Level Technical Symposium	Paavai Engineering College, Namakkal.	29 <sup>th</sup> -30 <sup>th</sup> September 2011
24.	Resource Person	Faculty Development programme on Antennas and Wave Propagation	Paavai Engineering College, Namakkal.	16 <sup>th</sup> -22 <sup>nd</sup> December 2011
25.	Distinguished Chief Guest	National Conference on recent Advances in Signal Processing and Communication	Vivekanadha College of Engineering for Women	21 <sup>st</sup> February 2012
26.	Chief Guest	Inaugural Function of ECE Association	Achariya College of Engineering Technology	17 <sup>th</sup> February 2012
27.	Resource Person	Guest Lecture on Antenna Arrays and Mini project Expo	IFET College of Engineering	27 <sup>th</sup> March 2012
28.	Chair Person	International Conference in Engineering, Technology and Management	Rajiv Gandhi College of Engineering and Technology, Puducherry	30 <sup>th</sup> August 2012

29.	Resource Person	Guest Lecture for PG Students on Microwave Integrated Circuits	Jayaram College of Engineering and Technology, Trichy	21 <sup>st</sup> April 2012
30.	Tutor	Workshop on Mobile networks	Periyar Maniammai University	11 <sup>th</sup> April 2013
31.	Resource Person	FDP on advanced Wireless Communication Systems	Vivekanadha College of Engineering for Women	22 <sup>nd</sup> Nov. 2013

### 8. Area of Specialization

Personal wireless communications, satellite communications, analog and digital communication, Digital Image Processing.

### 9. Membership with professional bodies

MISTE

### 10. Courses/ Conferences/workshop/ seminars organized

- Organized two - one day **workshops on sequential circuit design and Embedded system design.**
- Organized several seminars on topics like **4G networks, Embedded design, Research issues in optical networks.**
- Organised a **AICTE sponsored National Conference on Green Technology Concepts for bridging the digital divide using ICT**, 5<sup>th</sup> and 6<sup>th</sup> July 2013.
- Organised a **two day workshop on Numerical Computational techniques using Matlab** during Jan 2014.
- Organised a **two day workshop on Cloud Computing** during Feb 2014
- Organised a Panel Discussion on Green Communications on 12<sup>th</sup> Oct 2011.

11. Industrial/ International Relationships : **Nil**

### 12. Courses Taught

Personal wireless communications, satellite communications, analog and digital communication, Digital Image Processing, Electronic devices and circuits, SPREAD SPECTRUM TECHNIQUES, ANTENNAS, DIGITAL IMAGE PROCESSING, OFDM COMMUNICATIONS  
CELLULAR MOBILE COMMUNICATION, SIMULATION OF COMMUNICATION SYSTEMS,  
RF and WIRELESS COMMUNICATIONS

13. Board of Studies (Memberships details if any) : **Nil**

### 13. Photo Gallery



#### **14. Reviewer of Journals and Books etc**

- Reviewer of books and articles published by McGRAW HILL EDITION, NewDelhi
- **Editorial board member of IJ- ECIERD journal**
- **Reviewer of Science defense journal, Ministry of Defence, Govt. of India**
- Reviewer of journal –IEEE, TRANSACTIONS ON IMAGE PROCESSING (ad hoc basis)

#### **14. Other relevant information**

- Currently serving as Department student Counsellor