

## Dr. C. Tharini



Designation : Professor & Head

Nature of Employment : Regular

Qualification : B.E.,M.E,Ph.D

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## Teaching

### Educational Background

S.No	Programme	Class	University	Year of Completion
1.	Ph.D (Faculty of Information and Communication Engineering)	Completed	Anna University, Chennai	2011
2.	M.E (Applied Electronics)	I	Bharathiar University	2002
3.	B.E	I	Madras University	1997

## Work Experience

Designation :	Professor & Head
Date of Joining at BSACIST :	13.06.2002
Years of Experience at BSACIST :	18 years and 3 months

Previous Experience :

4 years

Organization Name & Address	Designation	Job Description	From	To
B.S.Abdur Rahman Crescent Institute of Science & Technology, Vandalur, Chennai	HOD	Administration	22.4.16	Till date
B.S.Abdur Rahman Institute of Science & Technology, Vandalur, Chennai	Professor	Teaching /Research	13.6.12	Till date
B.S.Abdur Rahman Institute of Science & Technology, Vandalur, Chennai	AP(SG)	Teaching /Research	1.4.09	12.6.12
Crescent Engineering College, Chennai	Lecturer	Teaching /Research	13.6.02	31.3.09
PSG College of Technology, Coimbatore	Lecturer	Teaching /Research	1.11.2000	30.4.02
PSG College of Technology, Coimbatore	Project Assistant	Research	23.3.98	31.10.2000

## Research

### Research Guidance

Currently guiding 5 research scholars

Two research scholars completed PhD.

### Areas of Research Interest

Wireless Sensor Networks

Wireless Networks

Wireless Communication

Signal Processing

### Research Publications- International Journals

Parnasree Chakraborty, C. Tharini, "Pneumonia and Eye Disease Detection using Convolutional Neural Networks", Engineering, Technology & Applied Science Research ,Vol. 10, No. 3, June 2020, pp.5769-5774, eISSN 1792-8036,pISSN 2241-4487, Web of Science, Emerging Sources Citation Indexed

R.Mahalakshmi,P.V.Bhuvaneshwari,C.Tharini & Vidyacharan Bhaskar "A Novel Algorithm to design Rate Adaptive Irregular LDPC codes" Wireless Personal Communications, Springer March 2020.  
<https://doi.org/10.1007/s11277-020-07223-3>

Kalaivani, S., Tharini, C., Saranya, K. et al. Design and Implementation of Hybrid Compression Algorithm for Personal Health Care Big Data Applications. Wireless PersCommun (2020).  
<https://doi.org/10.1007/s11277-020-07241-1>

S.Kalaivani and C.Tharini, “Analysis and implementation of novel Rice Golomb coding algorithm for wireless sensor networks”, Volume 150, 15 January 2020, Pages 463-471.

<https://doi.org/10.1016/j.comcom.2019.11.046>

Ambika, A. & Tharini, C. & Ali, M “Novel D SRR-based dual band antenna for WiMAX/C applications” Microwave and Optical Technology Letters. 61. 10.1002/mop.31578, 2018

G. Sudha, Dr.C.Tharini,” Modified Contourlet Transform Based Effective Image Compression Framework for Wireless Sensor Networks”, Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 01-Special Issue, 2018

Subhashree, V.K., C.Tharini,” An Energy Efficient Routing and Fault Tolerant Data Aggregation (EERFTDA) algorithm for wireless sensor networks”, Journal of High Speed Networks, vol. 23, no. 1, pp. 15-32, January 2017,DOI 10.3233/JHS-170554.

ParnasreeChakraborty and C. Tharini, “Performance Analysis of Threshold Based Compressive Sensing Algorithm in Wireless Sensor Networks”, American Journal of Applied Sciences, Issue 7, February 2017, DOI: 10.3844/ajassp.2017

Subhashree V K and ThariniC,”Real-time implementation of Locality Sensitive Hashing using NI WSN and LabVIEW for outlier detection in wireless sensor networks”,Journal of wireless mobile networks, ubiquitous computing and dependable applications, Volume No.7, Issue No.3, Page Nos. 22-39, September 2016.

S.Kalaivani and Dr.C.Tharini “Efficient Data Compression Technique Using Modified Adaptive Rice Golomb Coding for Wireless Sensor Network” ARPN journal of Engineering and applied sciences,VOI 10,No 12,JULY 2015.

Ms, ParnasreeChakraborty and Dr.C.Tharini, “Analysis of suitable modulation scheme for compressive sensing algorithm in wireless sensor network” DOI: [SR-06-2014-666](#), Sensor Review, Vol. 35 Iss: 2, pp.168 – 173, 2015.

Ramya.P, Parnasree Chakraborty, Dr. C.Tharini, “Analysis Of Electroencephalography (EEG) For Alzheimer’s Disease”, International Journal Of Applied Engineering Research ,Volume 10, Number 20 (2015), pp.16286-16290, 2015.

S.Vidhya, Dr.C.Tharini, Parnasree Chakraborty,”An Efficient Compressed Sensing CODEC for Wireless Sensor Networks” International Journal Of Applied Engineering Research ,Volume 10, Number 20 (2015), pp. 17293-17297, 2015.

Chellappa Glory, Joy Merline, Dr.CTharini, Govindarajan, Uma Gowri “An Efficient CRC based Network on Chip (NoC) Architecture for Improved Quality of Service(Qos)” International Journal of Applied Engineering Research ISSN 0973-4562, Volume-9 Number 23(2014) pp 18849-18866.

C. Tharini, P. VanajaRanjan, “An Energy Efficient Spatial Correlation based Data Gathering Algorithm for Wireless Sensor Networks”, International journal of Distributed and Parallel Systems,Vol 2, No.3,pp 16-24, May 2011

C. Tharini, P. Vanaja Ranjan, “An Efficient Data Gathering Scheme for Wireless Sensor Networks”, European Journal of Scientific Research, Vol. 43, No. 1, pp 148 – 145, 2010

C. Tharini, P. VanajaRanjan, “Design of Modified Huffman Data Compression Algorithm for Wireless Sensor Network”, Journal of Computer Science, vol.5 No.6, 466 – 470, 2009

## Research Publications : Conference

P V Bhuvaneshwari ; C Tharini, LDPC Codes for Distributed Storage systems,IEEE, 2019 11th International Conference on Advanced Computing (ICoAC),18-20 Dec. 2019, IEEE Conference, MIT, Chennai

R.Mahalakshmi alias Isakki, **Dr.C.Tharini**, M.Arulvani “Performance analysis of Pulse shape filter for repetition channel coding “ Proceedings of IEEE international conference on Power,control,signals and Instrumentation Engineering (ICPCSI-17) during September 2017. 978-1-5386-0814-2/17/\$31.00 ©2017 IEEE

M.Nazneen, **C.Tharini** “Analysis of different pulse shaping filters for BPSK and QPSK modulation techniques in a communication channel using USRP “Proceedings of International Conference on Recent Trends in Engineering and Technology, April, 2016.

Ms. Kalaivani, **C.Tharini** “Efficient Data Compression Technique Using Modified Adaptive Rice Golomb Coding for Wireless Sensor Network” was presented in the International Conference on Technological convergence for Information, Health, Food and Energy Security (TCIFES 2015) at CLRI, Chennai.

Ms.Kalaivani, **C.Tharini** “An Efficient Clustering Algorithm for Spatially Correlated Sensor Network” was presented in the International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS’15) at Karpagam College of Engineering, Coimbatore.

Ms. Kalaivani, **C.Tharini**, “Processing of ECG Signal for the Detection of Diabetic CAN” was presented in the International Conference on Recent discoveries of Diabetic biomarkers and challenges ahead (ICDB 2015), at BSAIST, Chennai.

Ms.Kalaivani, **C.Tharini** “Real time ECG acquisition and detection of Anomalies” was presented in the International Conference on Power, Circuit and Information Technologies (ICPCIT 2015),at Velammal College of Engineering, Chennai

Shyamala, **C.Tharini**, “Design of Data Aggregation Algorithm using Random Linear Network Coding in Wireless Sensor Networks”, IEEE Sponsored International Conference on Innovation , Embedded and Communications Systems, organized by Karpagam University, Coimbatore, March 2015.

S.Vidhya, **Dr.C.Tharini**, ParnasreeChakraborty,”An Efficient Compressed Sensing CODEC for Wireless Sensor Networks, IEEE Sponsored International Conference on Innovation , Embedded and Communications Systems, organized by Karpagam University, Coimbatore, March 2015.

Ramya.P, Parnasree Chakraborty, **Dr. C.Tharini**, “Analysis Of Electroencephalography (EEG) For Alzheimer’s Disease”, IEEE Sponsored International Conference on Innovation , Embedded and Communications Systems, organized by Karpagam University, Coimbatore, March 2015

V.K. Subhashree, **C. Tharini**, M.Swarna Lakshmi, “ Modified LEACH: A QoS-aware Clustering Algorithm for Wireless Sensor Networks ” Proc. of 2014 IEEE International Conference on Communication and Network Technologies (ICCNT) 978-1-4799-6266-2/14/\$31.00 © 2014 IEEE

Sirajueen S, **Dr.C.Tharini**, An Optimal network design to provide secured communication in mobile ADHOC networks”, Conference on “Recent trends in communication, Electronics and Instrumentation”, Erode Sengunthar Engineering College, 13th April 2013.

Balakumar.A, **Dr.C.Tharini**,” Tree based data aggregation algorithm to increase the lifetime of wireless sensor network”, Expanding horizon in computer, information technology, telecommunication, Electrical and electronics-“EXCITE-2013”, Prathyusha institute of technology and management, 2nd and 3rd April 2013.

## Chapter Publication

The chapter titled “Real time ECG acquisition and detection of Anomalies” is published in the book Advances in Intelligent Systems and Computing, Springer India, ISSN: 2194-5357, 06 February 2016, Volume 394, pp 503-513.

## Reviewer:

Reviewer for the paper submitted to Journal of Computers, Academy Publishers, UK.

## Certificate of Appreciation

Appreciated for the role as Single point of Contact(SPOC) for the NPTEL Local Chapter of BSACU which is rated as “A” based on the performance in NPTEL online certification courses during January –June 2017.

Awarded certificate for providing excellent academic result in the Anna University examination for the course Computer Networks

## Extension

Carried out IET funded student research project on Smart Health Monitoring System for Elderly Patients using IoT.

Knowledge Expert for the CIIC Start up “Falcon-D” which received Rs 2 Lakh grant for the project ‘Warehouse maintenance using dynamic door based statics solutions” from EDII, Govt of Tamilnadu.

Knowledge Expert for the CIIC Start up “Shrimp Hoard Technologies Pvt Ltd” which received Rs 5 Lakhs grant for the project ‘Sensor based smart water quality monitoring for agriculture” from EDII, Govt of Tamilnadu.

Received fund Rs 0.60 Lakhs from Jasmin Infotech Chennai to implement the project titled “Monitoring System for Dementia Patients” for SCARF organization Chennai under Corporate social responsibility (CSR) Scheme.

Knowledge Expert for the CIIC Start up “Agrit Green house solutions” which received Rs 5 Lakh grant from Innovation Voucher Program (IVP) grant by EDII, Govt of Tamilnadu.

Knowledge Expert for Wegot Utility Solutions which received Rs.2 Lacs from Innovation Voucher Program (IVP) seed grant by EDII, Govt of TN.

With a Goal of contributing to the Society, guided the Student members of “Social Technical Service Club” of ECE department to implement the following three projects in a Govt. High School at Karanaipudhucherry near Urapakkam and handed over the same to the school Principal during November 2017.

**Automatic water level controller** (II year ECE students Mr.J.Prasanna, Mr.S.Ganesh and Mr.K.Lokeshwaran)

**Automatic Bell** (II year ECE students Ms.R.Karthiyayini, Ms.M.Hansika, Ms.S.Priyanka, Ms.V.R.RajaPriya and Ms.P.Pavithra)

**Bio-metric (Finger print bases)** attendance system – (III yr ECE Mr.Mohamed Basith Adnan, Mr.M.Mohamed Afrid and Mr. V.S.Akash)

## Consultancy work

Completed a research consultancy on “An automation using LabVIEW program to interface LCR meter and Furnace for the measurement of dielectric property at high temperature“ for Centre for High Pressure Research, School of Physics, Bharathidasan University during 2018.

As the Convenor of Innovation Centre organized the following events:

The Inno Idea Contest was conducted on 17.02.17 to showcase the budding talents of our students. 12 innovative ideas which are of social relevance were selected for in-house funding

by the innovation centre to convert the ideas into prototype models. These projects are under progress.

An Inno-Contest 2016 was organized by the Innovation centre on 27.04.16. 30 batches of student teams displayed their innovative ideas. Best ideas were awarded cash prize worth Rs.20,000/-.

## **Additional Responsibilities**

Coordinator – Center of Innovation in Teaching and Learning

Member – Academic Council, BSACIST

Vice Chair Person – Internal Compliant Committee

University MOOC Coordinator

Chairman – Board of Studies, BSACIST

Member – NAAC – Central Co-ordination Committee

Advisor – IETE, Student Branch of BSACIST

Convener – APJ Abdul kalam Innovation center (2015-2017)

## **Professional Body Membership**

Life member – Computer society of India (CSI)

Fellow of Institution of Electronics & Telecomm. Engineers-FIETE

## **Guest Lecture Delivered**

Delivered a guest lecture on “Data acquisition using Matlab & Labview” in a three days workshop on “Real time Data Acquisition using Matlab & Labview during September 2017.

Delivered a lecture on “Overview of Matlab” in the state level symposium on Applications of Matlab in Computer Science , organized by CSE Department, Stella Maris College, Chennai.

Delivered Keynote Address in the National Conference on Advances in Computing Technologies- NCACT’15 organized by CSE Department, Kings College on 10.3.15.

Delivered a keynote address on “ Data Aggregation in WSN and also chaired a session in National Conference on Emerging Trends in Information Technology & Computer Science 5,6 June 2013 at Kingston College of Engineering, Vellore

Delivered a keynote address on “Research issues in Wireless Sensor Networks” in the National Conference on “Emerging Trends in Information and Computer Technology” on June 2013, organized by Kingston Engineering College, Vellore.

Delivered Keynote Address in the Electronics,Communication& Information systems ICECI-2012 International conference organized by Kalasalingam University”.

Delivered a lecture on DRDO and BRNS sponsored Workshop on “Network Simulation using NS-2” – 31st March, 2012 at Kalasalingam University.

Delivered a keynote address on the topic “Information Processing Techniques for energy efficiency in Wireless Sensor Networks at International Conference on”Electronics,Communication &



Information systems ICECI-2012" on November 2, 2012 organized by Kalasalingam University, Srivilliputhur.

Delivered a Guest lecture on the topic "Recent trends of Wireless Network" in Melmaruvathur Engineering College on 27th feb. 2010.

## Chair person in National /International Conference

Delivered Keynote Address in the National Conference on Advances in Computing Technologies- NCACT'15 organized by CSE Department, Kings College on 10.3.15.

Chief Guest for the state level symposium on Applications of MATLAB in Computer Science, February 27-28, 2014, organized by Stella Maris College, Chennai

Delivered a keynote address on "Data Aggregation in WSN and also chaired a session in National Conference on Emerging Trends in Information Technology & Computer Science 5,6 June 2013 at Kingston College of Engineering, Vellore .

Chaired a session at National Conference on VLSI, Communication and Networks organized by Easwari Engineering College on April 17<sup>th</sup> 2012, Chennai

Delivered Keynote Address in the Electronics, Communication & Information systems ICECI-2012 International conference organized by Kalasalingam University".

Delivered a lecture on DRDO and BRNS sponsored Workshop on "Network Simulation using NS-2" – 31<sup>st</sup> March, 2012 at Kalasalingam University.

Chaired a session at National Conference on VLSI, Communication and Networks organized by Easwari Engineering College on April 17th 2012, Chennai

Chaired a session at International Conference on Communication and Signal Processing" organized by Adhiparasakthi Engineering College on 5th April 2012.

Chaired a session at National Conference on Computers and Networking on 24th March organized by Adhiparasakthi Engineering College, Melmaruvathur

## Conferences Organized

Organized the International Conference on Recent Trends in Electrical, Control and Communication (RTECC-18) during March 20th – 22nd, 2018.

Organized the National conference NCRVIC-16 conducted during 11th and 12th of August 2016.

## Workshop/Seminar/Guest lecture Organized

Convener for a two days seminar on **"Entrepreneurship Awareness in the field of information and communication"** during 5th and 6th September of 2018.

Convener for CLAD training during July 2018.

Convener for the one day workshop on "Embedded Application design using Arduino board" for plus two students on 9th April 2018.

Convener for the one day **"Carrier Guidance"** program for **plus two and diploma students** on 7th April 2018.

Convener for a two days workshop on "Industrial IOT" during 6th and 7th of April 2018.

Convener for the national level technical symposium "SPECTRON-18" on 4th April 2018.

Arranged a supplementary course on “INTERNET OF THINGS FUSION BETWEEN CONNECTED CAR & HOME “delivered by the adjunct faculty Mr.VijayAnand,Asst Vice President, Aricent Technologies during 28.3.18 and 29.3.18.

Convener for the national seminar on “smart nano materials for Sensor Application” during 24th and 25th January 2018.

Convener for a series of “**Skill development workshops**” for 8th semester B.E/B.Tech students from 4/12/17 to 9/12/17.

Convener for the three days workshop on “ Design of microstrip antennas using HFSS” from 5th October 2017 to 7th October 2017.

Convener for the two days workshop on “Hands-on Python Programming” on 26th and 27th September 2017.

Convener for the three days workshop on “Real time signal acquisition and signal processing” between 20/09/17 and 22/09/17.

Inaugurated the Student chapters of technical societies IE and IETE on 15/09/17

Organized Expert’s Lectures being delivered by Foreign faculty to supplement the course ‘ECB3102 Digital Communication’ for the benefit of V sem ECE students.

Convener for the one week training program for Certified LabVIEW Associate Developer (CLAD) from 05.06.2017 to 10.06.2017.

Convener for the ICMR sponsored five days national level workshop on “Biomedical Signal Processing and Computational Biology for Healthcare Applications” from 12.5.17 to 16.5.17.

Organized Alumni Connect Program on 29th April 2017.

Convener for the free hands – on workshop on “Application using Arduino board” during 4th April 2017 for school students(+2 students)Convener for the career guidance and counseling program for higher secondary school students (+2 students) on 12th April 2017

Convener for the three days workshop on “Antenna Design Using HFSS”, from 16th to 18th March 2017.

Convener for the a two days Free Hands – On workshop titled ” PCB Layout and Board Design” on 3rd & 4th March 2017.

Convener for the three Days Hands on training on Labview during Feb 23 -24, 2017.

Convener for the two days Free Hands – On workshop titled ” Application Design Using Arduino Board” during 23-02-2017 and 24-02-2017.

Organized a guest lecture on “Evolution of Cinema Sound: Next Generation 3D Sound in a theatre by Dr. Prabhat Singh, Engineering Program Manager, Analog Devices, USA – India on 15th Feb 2017.

organized a guest lecture on the topic ” Health monitoring and Network Security ” by Professor Janet Light, Ph.D. Faculty of Science, Applied Science and Engineering (SASE) University of New Brunswick, Saint John on 23-11-2016.

Inaugurated the activities of SECE,IE and IETE for the academic year 2016-17 on 5th October 2016.

Convener for the Two day workshop on “Basic of Computer hardware and software trouble shooting “in association with Student Chapter (IE )for Lab instructors during 28th July and 29th July 2016

Convener for the two day workshop on “Antenna Fabrication,PCB Design and Fabrication” in association with EntupleTechnologies,Bangalore on 18th and 19th of July 2016.



Convener for the three day FDP on “innovative teaching practices” in association with Student Chapter(IE) during 25th to 27th July 2016.

Organized a two days workshop on LabVIEW simulator during 6th and 7th of August 2014.

Organized two days National Conference on Recent Trends in VLSI, Information and Communication, NCRVIC 2014 on 26th and 27th March 2014.

Organized two days workshop on WSN research issues and practical solutions on 13th and 14th December 2012.

Organized a 2 day workshop on “ Wireless sensor Network and its Applications” August 4 – 5 2010.

Organized 3 day “In House Orientation Program” for the benefit of the young faculty members of Crescent engineering College.