#### CURRICULUM VITAE

Dr.M.BHUVANESWARI Assistant Professor Senior Grade Department of ECE UCE – BIT Campus, Tiruchirappalli 620 024 Contact no: 9791438182 Mail. ID: bhuvanakirran@gmail.com, bhuvanakirran@aubit.edu.in



#### Research Area:

- Heterogeneous Networks and Next Generation Networks
- Wireless and Mobile Networks

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• Machine Learning and Image Processing

#### Educational Qualifications:

Qualification	College/University	Year of completion	Percentage	Class
Ph.D. (specialization) ICE	ANNA UNIVERSITY	2014	Highly Commended	
PG (specialization) Communication Systems	ANNA UNIVERSITY	2005	80	I Class with Distinc tion
UG (specialization) ECE	BHARATHIDASAN UNIVERSITY	1998	74	I CLASS
Others				

#### **Experience:** (chronological order)

Name of Company / Institutions	Designation of Post	From	То	Experience in Year
Bharathidasan Institute of Technology, Anna University, Tiruchirappalli	Assistant Professor	2009	TILL DATE (2023)	14

Bharathidasan Institute of Technology, Anna University, Tiruchirappalli	TRA,Lecturer	2007	2009	2
Mookambigai College of Engineering, Pudukkottai	Lecturer, Assistant Professor	1998	2007	10

#### > <u>Awards / Honours Received:</u>

> Young Faculty Research Support Scheme Researcher Award, TEQIP, 2015

#### > Additional / Academic Responsibilities at University:

1. Class Coordinator, Chairperson ,Member in PDC, Project Coordinator and Laboratory in charge.

#### > <u>Membership of Scientific and Professional Societies:</u>

- ISTE
- BES (I) Life member
- Associate Member (UACEE) Status in the IRED.

#### Fellowships and Grants received:

➢ CTDT Grant ,TEQIP .

#### Completed PG/UG Projects:

- a. Number of PG Projects Completed: 7 Nos
- b. Number of UG Project Completed: 30 batches

#### <u>Research Guidance (Ph.D.) (Completed):</u>

S1. No	Name of the scholar	Title of the thesis	Year of registration	Date of viva voce
1.	M.Singaravelan	Study of Quality of Service (QoS) metrics for Enhancing the performance of Mobile	2016	18.10.22

		Adhoc Networks		
2.	M.Rekha	"Performance Evaluation of 3D M-Tier Heterogeneous Network and Cross-Tier Interference Management for IoT based m-Health Applications".	2016	7.8.2023

# > <u>Research Guidance (M.S/Ph.D.) (Ongoing):</u>

S1. No	Name of the scholar	Tentative Title of the thesis	Year of registration	Status
1.	V.Brinda	Spectrum Sensing in Cognitive Radios	2016	Thesis Submitted
2.	G.Jennilasree	Forecasting Solid Waste Management using Machine Learning	2016	Confirmation Completed

#### Publications:

#### a. <u>Books / book chapters:</u>

- 1. Heterogeneous Networks: Towards 5G (Network Architecture, Energy Effectiveness & Performance Exploitation) A.P.H Publishing Corporation, New Delhi,2020
- 2. Algorithms, Methods and Applications of Mobile Computing and Communications IGI GLOBAL PUBLISHERS, 2019

# b. International Journals:

1. **Bhuvaneswari M**, N. Shenbagavadivu, R. Shanmugalakshmi & I.Bremnavas Analytic Hierarchy Process-Based Cell Ranking in Cellular Networks using continuous statistical measure technique for Telemedicine Applications. IETE Journal of Research 2017,https://doi.org/10.1080/03772063.2017.1332497,page 1-11.ISSN:0377-2063(print) 0974-780X (online) Journal homepage: http://www.tandfonline.com/loi/tijr20.

- 2. **Bhuvaneswari M**,Shanmugalakshmi R Estimation of Always Best Connected Network in Heterogeneous Environment based on prediction of Recent Call History and Call Blocking Probability. International Journal of Mobile Computing and Multimedia Communications IGI Global Press 5(4) 1- 14 2013. IF 0.346.
- 3. **Bhuvaneswari M**, Shanmugalakshmi R Optimal Heterogeneous Network Selection based on estimation of Network Quality Factor(NQF) Asian Journal of Information Technology 13(1) 1-10 2014.
- 4. **Bhuvaneswari M**, Shanmugalakshmi R Quality of Service (QoS) Enhancement for MobileMultimedia Applications using Cross-Layer (CL) Mapper International Journal of Applied Engineering Research 10(7) 18581- 18592 2015.
- Shenbagavadivu, N., Bhuvaneswari, M., Bremnavas, I., Enrich Mobile Data Availability Using Customized Delegate Object Migration Model in Distributed Mobile Environment Asian Journal of Information Technology, Medwell Journal 2016, ISSN 1682-3915 15(1) 46-53 2016
- 6. Bremnavas, I., Shenbagavadivu, N., RajaMohamed, I., **Bhuvaneswari, M.** A Review and Research Towards the Reliable Wireless Network Technology in Medical Applications Middle-East Journal of Scientific Research, IDOSI Publications pp. 2326-2331 2015
- N. Shenbagavadivu, I. Bremnavas, M. Bhuvaneswari and G. Geetha Ramani, Distributed Model for M-Com Applications Using Delegate Object, Middle-East Journal of Scientific Research, 23 (9): 2302-2306, 2015 ISSN 1990-9233 © IDOSI Publications, 2015 DOI: 10.5829/idosi.mejsr.2015.23.09.22738.
- 8. **Bhuvaneswari** M,Seethalakshmi P A Framework for improvising service of multimedia applications in mobile networks,The International Journal of Multimedia & Its Applications (IJMA) vol.3, no.2, pp.82-100. DOI: 10.5121/ijma.2011.3206.IJMA 3(2) 82-100 2011.
- Bhuvaneswari M ,Subbulakshmi R & Seethalakshmi P, 2012, 'Quality of Service (QoS) Enhancement for Multimedia Applications using Sorter with Earliest Expiry Time (SWEET) Technique',International Journal of Applied Information Systems, vol. 2, no.3, pp.47-51.
- 10. Bhuvaneswari M & Seethalakshmi P , 2011, 'Application Based Utility Adaptation with Prioritized Weight Assignment Strategy for Minimizing Delay in Multimedia Applications, International Journal on Computer Science and Engineering, vol.3, no.4, pp. 1672-1680.

11. **Bhuvaneswari M** & Seethalakshmi P, 2011, 'A Survey on QoS Enhancement in Mobile Multimedia Services using Cross-Layer Design in 4G Wireless Networks', International Journal of Computer Applications, vol.19, no.4, pp.14-18.

#### c. <u>National Journals:</u>

- d. **Bhuvaneswari Mariappan** & Shanmugalakshmi Ramachandran,2014 ' Design and Development of Solar Powered Wireless Telemetering System (SPWTS) for Environmental Radiation Monitoring (ERM) of Nuclear Power Plants' ,National Conference on Reliability and Safety Engineering,Society for Reliability and Safety, pp. 349-352.
- e. **Bhuvaneswari Mariappan**, Ashmita. B, Vijaya. R, A simple design of Organ on Chip (OoC) system for glucose level and recovery of blood flow in artificial heart, Biomedical Research Journal. Accepted for Publication 2016.
- f. M.Singaravelan, **M.Bhuvaneswari**, T.Thiyagu , Survey of Mobile AdHoc Network Quality of Service TEQIP II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Sysytems (ICEEECS'16), Vol II ,Issue 1,pg105-110
- g. V.Brinda, Dr.M.Bhuvaneswari, Monisha Chandru, Study of various spectrum sensing techniques in cognitive radio, TEQIP II Sponsored TEQIP II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Sysytems (ICEEECS'16)24-26 September 2016, Vol II, Issue 1,pg.1-5
- M.Bhuvaneswari, R.Chitra devi ,LWDA+ Congestion control in WSN, CSIR Sponsored National Conference in Signal&image Processing & Communications 17/3/2011 & 18/3/2011.
- i. **M.Bhuvaneswari**, V.Elavarasi , Wireless Sensor Network based Physiological parameter monitoring system, IEEE –International Conference on Research and Development prospects on Engineering and Technology (ICRDPET2013) March29,30-2013 Vol. 2, pp 282-285.
- j. **M.Bhuvaneswari**, E.Ramasamy, Delay Minimization in cellular network using fair awareness technique,International Conference on Futuristic trends in Electronics Engineering, 02-03-13, 03-07-13,pp10-12.
- k. **M.Bhuvaneswari, T.Valarmathi,** Implementation of Multipacket reception technique in a space time coded MIMO OFDM System, International Conference on Futuristic trends in Electronics Engineering, 02-03-13, 03-07-13,pp23-27.
- 1. **M.Bhuvaneswari**, N.Shenbagavadivu, G.Jenilasree, A Study on Security Framework for Heterogeneous Network, TEQIP II Sponsored International Conference on Emerging

Trends in Electrical, Electronics and Communication Sysytems (ICEEECS'16)24-26 September 2016, Vol II ,Issue 1,pg.6-10

- m. M.Bhuvaneswari, R.Deepika Devi, A.Asai Velli, Wi-Fi Performance measurements in the hostel environment-A Case Study, TEQIP II SponsoredNational Conference on Nascent Technologies in Signal Processing and Communications-NT-SIPCOM'16, SEP1-2, 2016, Vol 1,pg 103-106.
- n. **M.Bhuvaneswari**,K.Shanmugapriya, Real Time Vehicle Accident detection and tracking using GPS and GSM, TEQIP II Sponsored National Conference on Nascent Technologies in Signal Processing and Communications-NT-SIPCOM'16,SEP1-2 ,2016, Vol 1,pg 165-168.
- o. M.Ramesh, **M.Bhuvaneswari**, A Simple Cross-Layer technique to enhance throughput of mobile network, National Conference on Recent trends in Information, Communication and Electrical Technologies, April 2,2016.

#### > <u>Patents:</u>

National Intellectual Property /Design Application Number 316641 001 dated 29.03.2019/The design patent of the garbage collector for medical and laboratory purpose.

$\triangleright$	Sponsored	Research	<b>Projects:</b>
-	opendered	11000011011	110 0000

S.No	Name	Title	Year	Funding Agency	Amount in Rs	Status
1.	J.Jenestan L.Sathish Kumar M.Sirajudeen	Wireless monitoring of paralytic patients using zigbee	2015	TEQIP II	10000.00	Completed
2.	M.Durgadevi P.Meenachi Preethi B.Kalaiselvi S.Hemalatha	Throughput performance analysis of IEEE802.16/j using relaying techniques	April 2016	TEQIP II	10000.00	Completed

3.	A.Akhalya	A Comparative	April	TEQIP II	10000.00	Completed
	M.Baby S.Manju S.Vishnu priya	study of various health monitoring techniques in wireless networks	2016			
4.	A.Elakkiya A.Evanjalin Vinsa G.Gayathri N.Kanimozhi	Study of Quality of Service Parameters of Heterogeneous Network (WiMAX &3G)from user's perspective	April 2016	TEQIP II	10000.00	Completed

# Consultancy Activities:

# > List of Seminar / Short Term Course /FDP/ Workshop organized:

Title	Details
One day student self development programme "Reaching the heights"	30/9/11
One day children's day programme for physically challenged children	Nov-11
PEACE'10-PROJECTS OF ELECTRONICS AND COMMUNICATION	17/9/10 to
ENGINEERS-NATIONAL LEVEL TECHNICAL EXHIBITION	18/9/10
PEACE'11-PROJECTS OF ELECTRONICS AND COMMUNICATION ENGINEERS-NATIONAL LEVEL TECHNICAL EXHIBITION	30/8/11
Two days workshop in GATE 2014 Training	21/1/2014 to 22/1/2014
CSIR Sponsored National Conference in Nascent Technologies in	17/3/11 &
Signal Processing & Communications –steering Committee member	18/3/11
TEQIP Sponsored National Conference in Nascent Technologies in Signal Processing & Communications – Technical Committee member	27/11/2014 & 28/11/2014

TEQIP II Sponsored FDP on "A Compendium in High Speed and	5/8/2013 to
Mobile Networks-HSMN'13"	11/8/2013
	19/06/2015
TEQIP II Sponsored FDP on "EC6501 Digital Communication-DC	
2015"	to
	25/06/2015
PEACE'08-PROJECTS OF ELECTRONICS AND COMMUNICATION	Aug
ENGINEERS-NATIONAL LEVEL TECHNICAL EXHIBITION	16th,2008
PEACE'10-PROJECTS OF ELECTRONICS AND COMMUNICATION	17/9/10 to
ENGINEERS-NATIONAL LEVEL TECHNICAL EXHIBITION	18/9/10
PEACE'11-PROJECTS OF ELECTRONICS AND COMMUNICATION	
ENGINEERS-NATIONAL LEVEL TECHNICAL EXHIBITION	30/8/11
PEACE'09-PROJECTS OF ELECTRONICS AND COMMUNICATION	Aug-09
ENGINEERS-NATIONAL LEVEL TECHNICAL EXHIBITION	Aug-09
	17/7/10 &
Two days National level Workshop on Networking simulation tools	18/7/10
	10/1/10
Two days National level Workshop on Design issues & Research	4/2/2011 &
challenges of OFDM in Wireless Networks	5/2/2011
One day national level seminar on "Strategic Teaching Quality	March 16th
	2013
Management for Technical Teachers-STQM-13"	2013
	26 & 27
National Level Symposium MICFA'19	September
	2019

# > List of Seminar / Short Term Course /FDP/ Workshop attended:

S1.N	Title of the Seminar	Details of the event
о.		
1.	Attended Research Initiative Programme on Wireless Communication systems in AUT,T	27/12/07 & 30/12/07
2.	Attended RIP real time embedded systems in AUT,T	22/7/2007 to 25/7/2007
3.	Attended two days seminar on Research	17/5/2008 - 18/5/2008

	methodologies in AUT, T	
4.	Attended Two Days National Level Seminar in Speech Processing and its Applications conducted in AUT,T	23/7/2010 -24/7/2010
5.	One Day Technical Seminar on Virtualization Technologies in B.S.Abdur Rahman University	18/1/10
S	Title of the Workshops	Details of the event
1.	One day National Level Work Shop on Discrete Event Simulation for protocol design in Wireless Networks	22/12/10
2.	One Day Work Shop in Teaching Methodologies in AUT, T	8/1/11
3.	One day workshop on NPTEL conducted by IITM at GCT,Coimbatore.	9/04/2013
4.	TEQIP II sponosored National level workshop on Institutional Development and Quality Management at Le Royal Meridien Hotel,Chennai.(ISTE)	11/12/13 to 13/12/13
5.	NI workshop on LabView and Data Acquisition Seminar at Hotel Breeze	29/4/14
6.	Symposium on Teaching Learning in Higher Technical Education conducted by IITM - Teaching Learning Centre,Sponsored by TEQIP.	22/01/2016 to 23/01/2016
7.	One day Workshop on IoT and Android App development using MATLAB/Simulink.(organized by Dept of ECE )at BIT Campus Trichy.	22/07/2017

S	Title of the Conferences/Workshops/Seminar	Details of the event
1.	28 days orientation Programme in UGC- ASC, BDU, Khajamalai Campus, Trichy	15/11/2012 to 12/12/2012
2.	TEQIP II Sponsored FDP on "Digital Image Processing" at BIT Campus Trichy	25/7/2013 to 31/7/2013
3.	AICTE Sponosored FDP on Pedagogy in Wireless Communication Technologies at MAM CE	18/11/13 to 30/11/13
4.	Two week ISTE Short Term Training Programme(STTP) on pedagogy for effective use of ICT in Engineering Education,conducted by IIT Bombay under National Mission on Education through ICT (MHRD,Government of India)	5/1/2015 to 7/1/2015 19/1/2015 to 21/1/2015 (Physical participation) 8/1/2015 to 18/1/2015 22/1/2015 to 31/1/2015 (online participation)
5.	TEQIP II Sponsored FDP on "Emerging trends in Mathematical Modelling and Simulation (ETMMS'15)" at BIT Campus Trichy	
6.	TEQIP II Sponsored FDP on "Empowering Educators in English Language Teaching (EEELT 15)" at BIT Campus Trichy	8/06/2015 to 14/06/2015
7.	DST Sponsored 10 days training programme on Big Data Analytics (organized by MCA) at BIT Campus Trichy	14/07/2016 to 23/07/2016

8.	TEQIP Sponsored FDP on Recent trends and	08/06/2016 to
	Applications of Mathematics in	21/06/2016
	Computing(Organized by Dept of Maths) at	
	BIT Campus Trichy	

#### > <u>National / International Conferences organized / Participated:</u>

- Bhuvaneswari Mariappan & Shanmugalakshmi Ramachandran,2014 ' Design and Development of Solar Powered Wireless Telemetering System (SPWTS) for Environmental Radiation Monitoring (ERM) of Nuclear Power Plants' ,National Conference on Reliability and Safety Engineering,Society for Reliability and Safety, pp. 349-352.
- Bhuvaneswari Mariappan, Ashmita.B, Vijaya.R, A simple design of Organ on Chip (OoC) system for glucose level and recovery of blood flow in artificial heart, Biomedical Research Journal. Accepted for Publication 2016.
- M.Singaravelan, M.Bhuvaneswari, T.Thiyagu, Survey of Mobile AdHoc Network Quality of Service TEQIP II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Sysytems (ICEEECS'16), Vol II, Issue 1,pg105-110
- V.Brinda, Dr.M.Bhuvaneswari, Monisha Chandru, Study of various spectrum sensing techniques in cognitive radio, TEQIP II Sponsored TEQIP II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Sysytems (ICEEECS'16)24-26 September 2016, Vol II, Issue 1, pg. 1-5
- M.Bhuvaneswari, R.Chitra devi ,LWDA+ Congestion control in WSN, CSIR Sponsored National Conference in Signal&image Processing & Communications 17/3/2011 & 18/3/2011.
- M.Bhuvaneswari, V.Elavarasi , Wireless Sensor Network based Physiological parameter monitoring system, IEEE –International Conference on Research and Development prospects on Engineering and Technology (ICRDPET2013) March29,30-2013 Vol. 2, pp 282-285.
- M.Bhuvaneswari, E.Ramasamy, Delay Minimization in cellular network using fair awareness technique,International Conference on Futuristic trends in Electronics Engineering, 02-03-13, 03-07-13,pp10-12.

- M.Bhuvaneswari, T.Valarmathi, Implementation of Multipacket reception technique in a space time coded MIMO OFDM System, International Conference on Futuristic trends in Electronics Engineering, 02-03-13, 03-07-13,pp23-27.
- M.Bhuvaneswari, N.Shenbagavadivu, G.Jenilasree, A Study on Security Framework for Heterogeneous Network, TEQIP II Sponsored International Conference on Emerging Trends in Electrical, Electronics and Communication Sysytems (ICEEECS'16)24-26 September 2016, Vol II, Issue 1, pg. 6-10
- M.Bhuvaneswari, R.Deepika Devi, A.Asai Velli, Wi-Fi Performance measurements in the hostel environment-A Case Study, TEQIP II SponsoredNational Conference on Nascent Technologies in Signal Processing and Communications-NT-SIPCOM'16, SEP1-2, 2016, Vol 1,pg 103-106.
- M.Bhuvaneswari,K.Shanmugapriya, Real Time Vehicle Accident detection and tracking using GPS and GSM, TEQIP II SponsoredNational Conference on Nascent Technologies in Signal Processing and Communications-NT-SIPCOM'16,SEP1-2 ,2016, Vol 1,pg 165-168.
- M.Ramesh, M.Bhuvaneswari, A Simple Cross-Layer rechnique to enhance throughput of mobile network, National Conference on Recent trends in Information, Communication and Electrical Technologies, April 2,2016.

# Professional recognitions: (details like chairperson/member of a committee, reviewer, editor ...etc)

- > IJMA (UGC Approved )
- IEEE Sponsored International Conference on Emerging Trends in Engineering Technology and Science -ICETETS 2016.
- ISTE
- BES (I) Life member
- Associate Member (UACEE) Status in the IRED.
- IEEE Transactions on Wireless Communication

# (A) Chairperson for conferences / Seminar / Technical symposia:

• BIT Trichy, Kings College of Engineering, GCE Salem, PABCET, Mookambigai College of Engineering, MAM.

# (B) Guest lectures delivered:

TOPIC	INSTITUTION	PLACE
		I LACE
TELEFET's 2010-	SACET Simon and	
Valedictory function	SACET,Siruganoor.	SACET, Siruganoor.
Introduction to MATLAB	MCE	MCE ,ISTE Chapter Sponsored
	MCL	MCE ,ISTE Chapter
Working of DTH	MCE	Sponsored
Mobile Multimedia		Sponsoroa
streaming	AUT T	AUT T
Wireless Communication		
– The need of the day	AUT THIRUKUVALAI	AUT THIRUKUVALAI
Wireless Communication		
Systems	AUT T	AUT T
"EC6501 Digital		
Communication-DC		
2015"TEQIP II		
Sponsored FDP	AUT T	AUT T
	K.RAMAKRISHNAN COLLEGE OF	
wireless communication	TECHNOLOGY	TRICHY
Design issues &		
Research challenges of		
OFDM in Wireless		
Networks	AUT T	AUT T
Information and Communication		
Technologies	MAMCET	MAMCET
Signal Processing and		MANCEI
Communication		
Technologies IETE	Kamaraj College of Engineering and	
SPONOSORED	Technology	MADURAI
HetNets- Future of		
Wireless		
CommunicationTEQIP II		
FDP	AUT T	AUT T
Research Issues in ICE		
TEQIP II FDP	AUT T	AUT T
EMERGING		
TECHNOLOGIES IN		
ELECTRONICSSYSTEMS		
TEQIP CONFERENCE	GCE SALEM	SALEM

EMERGING		
TECHNOLOGIES IN		
ELECTRONICSSYSTEMS		
TEQIP CONFERENCE	GCE SALEM	SALEM
5G TECHNOLOGIES		
FDP	Adhiyamaan College of Engineering	HOSUR
OPEN SOURCE		
SIMULATORS	AUT T	AUT T

- GCE Salem-5G Networks
- Kamaraj College of Engineering and Technology
- MAM College of Engineering and Technology
- Chenduran College of Engineering and Technology
- Mookambigai College of Engineeing
- K.Ramakrishnan College of Engineering and Technology
- Adhiyaman College of Engineering, HOSUR