

# ANNA UNIVERSITY

Chennai 600 025

## FORMAT FOR ANNUAL REPORT FOR THE YEAR 2018-2019 – JULY TO JUNE

Period from 01.07.2018 to 30.06.2019 (July to June)

Name of the Department / Centre / Institute :

- 1) Detailed list of Professors, Associate Professors, Assistant Professors and their **Ph.D. specialization** during the period **01.07.2018 to 30.06.2019**

Sl. No.	Name of the Professor/ Associate Professor/ Asst. Professor	E-Mail Address	Field of Specialization
1.	Dr. K. Bhoopathy Bagan Professor	kbb_mit@annauniv.edu	Signal & Image Processing
2.	Dr. Mala John Professor	malajohn@annauniv.edu	Image Processing & Pattern Recognition, Communication System
3.	Dr. M. Ganesh Madhan Professor	mganesh@annauniv.edu	Optical Communication
4.	Dr. M. Kannan Professor	mkannan@annauniv.edu	VLSI, Computer Architecture & Computer Networks
5.	Dr. P. Indumathi Professor	indu@mitindia.edu, indu@annauniv.edu	Communications and Networking
6.	Dr.P.T.V.Bhuvanewari Professor	ptvbmit@annauniv.edu	Wireless communication and networking, Wireless sensor networks
7.	Dr. S. Indira Gandhi Associate Professor	indira@mitindia.edu	Optical Communication and Networking
8.	Dr. M. Manikandan Associate Professor	maniiz@annauniv.edu	Image Processing
9.	Dr.P.Prakash Associate Professor	prakashp_mit@annauniv.edu	Signal Processing
10.	Dr.D.Meganathan Associate Professor	meganathan_phd@annauniv.edu	ADC Design, VLSI Architectures
11.	Dr.S.P.Joy Vasantha Rani Associate Professor	joy_mit@annauniv.edu	VLSI, Computer Architecture and Neural & Fuzzy
12.	Dr.G.Kavitha Associate Professor	kavithag_mit@annauniv.edu	Image processing
13.	Dr.S.Vasuhi Associate Professor	vasuhi_s@annauniv.edu	Micro wave and Optical communication

14.	Dr.S.Piramasubramanian Assistant Professor	spirama@annauniv.edu	RF Engineering & RF Photonics and optical communication
15.	Ms.G.Sumithra Assistant Professor	gsumithra@annauniv.edu	Wireless Communication and Image processing
16.	Dr.T.Subashri Assistant Professor	tsubashri@annauniv.edu	Networking, VoIP
17.	Mrs.C.Sridevi Assistant Professor	sridevijegan@annauniv.edu	VLSI Signal Processing, Digital Image Processing
18.	Dr.K.Mariammal Assistant Professor	mariammal@annauniv.edu	VLSI for Multirate Signal Processing
19.	Dr.C.Rimmya Assistant Professor	rimmya@annauniv.edu	Communication Systems
20.	Mrs.A.Divya Assistant Professor	arivalagandivya.25@gmail.com	Image Processing
21.	Mr.G.Balamurugan Assistant Professor	balanmail12@gmail.com	Sensor Networks
22.	Dr.V.Sathiesh Kumar Assistant Professor	sathieesh@gmail.com	Opto Mechatronic System Design, Embedded Systems

2) List of Degrees awarded during the period **01.07.2018 to 30.06.2019**

**a. M.Phil.**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of the Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
	Not Applicable			

**b. M.E. / M.Tech. / M.Arch. / M.Plan. / MBA / MCA**

**M.E. Wireless Technologies**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of The Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
1	UAV Relay In Vanets Against Smart Jamming With Machine Learning Techniques	Thayal Sankar P	Dr.L.Rajesh	Apr-19
2	Interference Alignment Assisted by Device to Device Communication for the Downlink of Mimo Heterogeneous Network	Baby Joice A	Dr.L.Rajesh	Apr-19
3	A Deep Learning Approach for Network Security Using Neural Network	Divyalakshmi B	Dr. K.Bhoopathy Bagan	Apr-19
4	Design of Metamaterial Antenna for Wireless Communication	Glory G	Mr. J. Logeswaran	Apr-19
5	Design and Development of Near Field Scanner for Linear Array Antennas	Jagankumar K	Dr.S.Piramasubramanian	Apr-19
6	Computationally Efficient Key Generation Algorithm for IoT	Koushika T	Dr.T.Subhashri	Apr-19
7	Certificate Authentication Based Enhanced Bluetooth Communication in Vehicle Automation	Mahalakshmi J	Dr.P.T.V.Bhuvaneshwari	Apr-19
8	Vehicle Counting In Crowded Scenes for Traffic Control System Using Convolutional Neural Network	Meena K	Dr.A.VIJI	Apr-19
9	A Multi-Temporal Framework For Human Violent Event Analysis In Video Surveillance Using CNN	Pradeepa B	Dr.A.Viji	Apr-19
10	Design and Simulation of If AGC Amplifier and Filter For TT&C Transponder for Space Application	Rebecca D	Mrs. R.Ramya	Apr-19
11	Rate Adaptation Using Chaotic Frequency Hopping for Antijamming Wireless Systems	Reshma K	Mr.G.Balamurugan	Apr-19
12	Design and Simulation of RF Modulator, Demodulator and IF Filter For TT&C Transponder for Space Application	Sakthi Priya B	Mr.J.Logeswaran	Apr-19
13	Resource Allocation for Heterogeneous Cognitive Radio Networks	Sanjeetha G	Dr.L.Rajesh	Apr-19
14	Relay Selection for Secure Cooperative Networks Using Diversity Combining Techniques	Sathiarani Chithra A	Mrs.Vineetha Mathai	Apr-19

15	Design of S Band Local Oscillator for TT&C Transponder for Space Application	Shalini R	Mr.J.Logeswaran	Apr-19
16	Energy Efficiency Improvement in WSN through Software Defined Network	Tamil Kodi K	Dr. S. Vasuhi	Apr-19
17	Logo Detection and Classification Using Faster Region Based Convolutional Neural Network for Traffic Surveillance Application	Vairamani S	Mrs.Mehar Nisha Begam	Apr-19
18	Hybrid Resource Allocation Approach for Cognitive Visible Light Communication	Varshney R	Dr. S. Vasuhi	Apr-19
19	A Wearable Antenna With Electromagnetic Band Gap (EBG) Structure for Wban	Varshni R	Dr. S. Vasuhi	Apr-19
20	Energy-Efficient Power Allocation for Mimo-Noma	Vinitha Steffy S	Dr.L.Rajesh	Apr-19
21	A Moving Vehicle Detection and Classification Using Deep Neural Network for Traffic Surveillance	Vinothini V	Mrs.Mehar Nisha Begam	Apr-19
22	Hyperspectral Image Classification Using Tesseract Method	Suruthi T	Dr.S. Indira Gandhi	Apr-19

**M.E. VLSI DESIGN AND EMBEDDED SYSTEMS – Full Time**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of the Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
1	Design of $2^4 \times 32$ bit SRAM using Quantum Dot Cellular Automata	Archana. V	Dr.D.Meganathan	April 2019
2	Design and analysis of FIR filter using MCM technique for audio applications	C. Banusha	Dr. K. Mariammal	April 2019
3	Modified path finder algorithm for FPGA	S. Divyath Ali	Dr.S.P.Joy Vasantha Rani	April 2019
4	Automation of Central Electronic Module (CEM) using VTEST studio	Gayathri. K	Mrs.C. Sridevi	April 2019
5	Design of high speed and low power Radix-8 DIT FFT using Floating point FMA unit	V. Janakipriya	Mr. O. Vignesh	April 2019
6	Design of FFT/IFFT algorithms using area and delay efficient computational elements	J. Jasmine Kavitha	Mr. E. Konguvel	April 2019
7	Integrated framework development for Body Control Module (BCM)	G. S. Jayalakshmi	Dr. M. Kannan	April 2019
8	SSOC SRAM based on chip memory for Image processing algorithms	Jayanthi. B	Dr. M. Kannan	April 2019
9	Threshold Inverter Quantization-(TIQ) based 4-bit ternary flash Analog to Digital Converter	Kalainan. M	Mr.N.Jagadeesh Kumar	April 2019
10	Design of logic blocks with increased efficiency for FPGA	M.C. Lavanya	Dr.S.P.Joy Vasantha Rani	April 2019
11	Measurement of Maggot Blowfly age using Image processing for Forensic applications	S. Lincy Manimala	Mrs. A. Divya	April 2019
12	FPGA based automation circuit design for Antibioqram device	K.M.S Madheswaran	Dr. V. Sathiesh Kumar	April 2019
13	Fault diagnosis architecture for Lightweight block cipher KLEIN	V. Pradeepa	Dr. M.Manikandan	April 2019
14	ASIC implementation of AES and Whirlpool combined cryptographic architecture for Digital signature application	V. Rajakumari	Mr. O. Vignesh	April 2019
15	Design of Binary counter based on Symmetric bit stacking	N. Raveena	Mr. O. Vignesh	April 2019
16	An efficient Near-lossless compression method for medical images	Ravi Chandrika. S	Mrs. V.Gowthami	April 2019
17	Design of Radix-4 Booth Multiplier with Low Power delay Minimization	Rishivanthi. S	Mr.N.Jagadeesh Kumar	April 2019
18	Design of FIR Adaptive filter using DA circuits for Bio-	G. Sahaana	Dr. K. Mariammal	April 2019

	medical applications			
19	Image quality improvement in kidney stone detection using Artificial Neural Networks	Sasti Krithika.V.C	Mrs. V.Gowthami	April 2019
20	Design of Approximate Reverse Carry Propagate Adder for DSP applications	Sharron Teena. J	Mrs.C. Sridevi	April 2019
21	Design of 4-bit ternary ALU using CNTFET	Tamilarasi. S	Dr.D.Meganathan	April 2019
22	Majority voting based reduced precision redundancy adders and its application to filtering	T.R. Thendral	Dr. K. Mariammal	April 2019
23	Design and implementation of Human safeguard measure using SCNN approach	Vaitheeshwari. R	Dr. V. Sathiesh Kumar	April 2019
24	Extracting standing human bodies segmentation using Image processing techniques	Vignesh Kumar. P	Mrs. A. Divya	April 2019
25	Static and Dynamic based scheduled router for FPGA	Vigneshwarar. V	Dr.S.P.Joy Vasantha Rani	April 2019
26	Implementation of optimized image encryption using 2D-SIMM based chaotic map	Rajashree. A	Dr. M. Kannan	April 2019

**M.E. VLSI DESIGN AND EMBEDDED SYSTEMS – Part Time**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of the Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
1	Design of Truncated Sequential Multiplier With Constant Error Compensation	Ilakkiya U.	Mr. O. Vignesh	April 2019
2	Controlling Vehicle Speed By Adjusting Accelerator Pedal Voltage	Janakiraman N.	Mr. K. Veerappan	April 2019
3	Design and Implementation of Hybrid Turbo Generator for Turbo Lag Reduction on IC Engine	Manikandan S.	Dr. V. Sathieshkumar	April 2019
4	Partial Product Generator For Redundant Binary Multipliers Using Redundant Binary Adders	Soundharya G.	Mr. E. Konguvel	April 2019



**M.E. COMMUNICATION & NETWORKING – Full Time**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of the Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
1.	Optimal resource allocation for traffic in wireless heterogeneous network	Muthu T	Dr. L. Rajesh	April 2019
2.	Voltage Modulation characteristics of 1.56 micro meter transistor LASER	Chandhini V R	Ms. R. Ramya	April 2019
3.	Reduction of errors while transmission using polar codes	Janjanam Sravya	Dr. K.Bhoopathy Began	April 2019
4.	Performance evaluation of relay selection methods in Cooperative networks using diversity techniques	Radhika R	Ms. Vineetha Mathai	April 2019
5.	Efficient joint source channel coding by information shortening	Sathya Shiva Ranjani S	Dr. K.Bhoopathy Began	April 2019
6.	Detection of diabetic retinopathy using deep convolutional neural networks	Shobana S	Dr. P. Indumathi	April 2019
7.	Performance of cooperative spectrum sensing in Cognitive Radio Networks	Suganya C	Mr. K. Tamilarasan	April 2019
8.	Performance analysis and testing of application interface for wireless mesh routers	Thomas Reuben Koshy	Dr. S. Piramasubramanian	April 2019
9.	Design of 4-bit Digital to Analog converter based on 2D photonic crystals.	Jannath Ul Firthouse V N	Dr. S. Indira Gandhi	April 2019
10.	Energy Efficient multipath routing protocol for mobile Ad-Hoc Network	Jilin Justin	Dr. S. Indira Gandhi	April 2019
11.	VLSI implementation of fixed point reconfigurable FFT processor	Jyotsna Y	Mr. E. Konguvel	April 2019
12.	Priority based scheduling for critical care patient in hospital environment	Saravanan N	Dr. P.T.V. Bhuvaneshwari	April 2019
13.	Performance prediction of photonic generated UWB signal transmission through wireless channel	Chitra T	Dr. M. Ganesh Madhan	April 2019
14.	Underwater Live fish recognition using deep learning model	Kavithaa K	Mr. G. Balamurugan	April 2019
15.	Brain tumor analysis using convolutional neural network	Kaviya K	Dr. G. Kavitha	April 2019
16.	Noise reduction and Localization of Binaural signal	Manjupriya B	Ms. G. Sumithra	April 2019
17.	Deduction of macro and micro nutrients in potatoes using elemental analysis techniques	Parameswaran R	Dr. P.T.V. Bhuvaneshwari	April 2019

18.	Analysis of Dispersion compensation using raised cosine filter	Pooja Poonkuzhali M	Dr. P. Prakash	April 2019
19.	Internet traffic classification using Q in Q on access nodes	Senapathy G S	Dr. G. Kavitha	April 2019
20.	Minutia based palm print matching	Vanmathi S	Ms. A. Divya	April 2019
21.	Classification of white blood cells using convolutional neural network	Vijaya Lakshmi K	Ms. S. Alagu	April 2019

**c. M.Sc. (2 years) programme**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of the Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
	Not Applicable			

d. **M.Sc. (5 years) programme**

<b>Sl. No.</b>	<b>Title of the Thesis</b>	<b>Name of the Scholar</b>	<b>Name of the Supervisor</b>	<b>Month &amp; Year of Viva-voce conducted</b>
	Not Applicable			

3) Sponsored Research Projects sanctioned during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Name of the Project</b>	<b>Name of the Co-ordinator</b>	<b>Amount (Rs. in lakh)</b>	<b>Sponsoring Agency</b>
1.	Performance Enhancement in FPGA architecture by efficient design of logic blocks	<b>Mentor:</b> Dr.S.P.Joy Vasanth Rani <b>Research Scholar:</b> Ms.P.Sudhanya	17.80	DST - Women Scientist Scheme A
2.	Home Automation and Personal Assistant using Artificial Intelligence	<b>Mentor:</b> Dr.K.Mariammal <b>Students:</b> Vishal.K, Srivatsan.R, Ajay Karthi	0.12	Student Innovative Project-CTDT
3.	Intelligent Alcohol Detector	<b>Mentor:</b> Dr.K.Mariammal <b>Students:</b> S.Jithesh Gudan Bhavya Doddapaneni, C.S.Madhan Kumar	0.10	Student Innovative Project-CTDT

4) Industrial Consultancy and Testing undertaken during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Title of the Consultancy</b>	<b>Name of the Co-ordinator</b>	<b>Amount (Rs. in lakh)</b>	<b>Sponsoring Agency</b>
1.	Antenna Characteristic Evaluation	Dr M Ganesh Madhan	0.41	M/S Amphenol Omnicomnect India Pvt Ltd
2.	Study of LED driver requirements for illumination applications	Dr M Ganesh Madhan	0.24	M/S Radio Studio
3.	Auto vault Security Service	Dr V.Sathiesh Kumar	Honorary	M/s.Chennai Central Co-Operative Bank
4.	Corporate Advisor to Arraystrom Lighting Private Limited	Dr. Mala John	0.32	M/s.Arraystrom Lighting Pvt Limited

5) **Continuing Education Programmes :**

5.1 Training Programmes / Short-term courses and Workshop **conducted** during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Title of the Programme</b>	<b>Date</b>	<b>No. of Participants</b>	<b>Name of the Co-ordinator</b>	<b>Sponsoring Agency</b>
1.	Training on LAB VIEW Software	14.02.2019 to 15.02.2019	33	Dr.G.Kavitha	National Instruments

5.2 Training Programmes, Short-term courses and Workshop **attended** by the Faculty members in other Institutions during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Name of the Faculty Member and Designation</b>	<b>Date</b>	<b>Title of the programme attended</b>	<b>Venue</b>
1.	Dr. V. Sathiesh Kumar Asst. Prof	08.07.2018 to 14.07.2018	GIAN Course on "Laser assisted surface micro and nano fabrication"	Department of Mechanical Engg., IIT Indore
2.	Dr.G.Kavitha Associate Professor	23.07.2018 to 27.07.2018	Teaching and training programme under Erasmus +	University of Edinburgh, United Kingdom
3.	E. Konguvel Teaching Fellow	02.08.2018	Data Analytics, Automated Driving and System Level Simulation	MathWorks Inc., Chennai
4.	E. Konguvel Teaching Fellow	04.05.2019	Scilab Workshop	Indian Institute of Technology, Bombay
5.	Dr.G.Kavitha Associate Professor	09.05.2019 to 10.05.2019	To attend technical workshop of Young Faculty Research Fellows (YFRFs)	IISC Bengaluru
6.	P.Kasthuri Teaching Fellow	07.06.2019 and 08.06.2019	Recent Trends in Photonics & Hands on Training using Optisystem	IFET College of Engineering, Villupuram
7.	Dr. V. Sathiesh Kumar Asst. Prof	10.06.2019 to 23.06.2019	DST Sponsored 2-Weeks Workshop on "Data science and Big Data Analytics"	Dept. of IT, Easwari Engineering College



5.3 Conferences / Seminars / Symposium **conducted** by the Department / Centre / Institute during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Names of the Conferences / Seminars / Symposium / conducted</b>	<b>Date</b>	<b>No. of participants</b>	<b>Venue</b>	<b>Sponsoring Agency</b>
1.	Apocalypse'18	28.09.2018 to 29.09.2019	100 (various events)	Electronics Engineering	NIL
2.	Electro focus 2019	31.01.2019 to 02.02.2019	120 (various events)	Electronics Engineering	LIC India

6) **Faculty Development :**

6.1 Conferences / Seminars / Symposium attended by the Faculty Members of Anna University at **National Level** during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Faculty Name and Designation</b>	<b>Names of Conferences / Seminars / Symposium / attended</b>	<b>Date</b>	<b>Address of Organised Institute</b>
1.	Dr.S.P.Joy Vasantha Rani Associate Professor	International conference on computational vision and bioinspired computing(ICCVBIC)	29.11.2018 to 30.11.2018	RVS technical campus Coimbatore
2.	Dr.S.Vasuhi Associate Professor	National level seminar on "One day Orientation Programme for Young Teachers"	13.02.2019	MIT Campus, Anna University
3.	Dr.S.Vasuhi Associate Professor	5 <sup>th</sup> National Conference on "Recent Trends in Instrumentation and Control (RTIC-2019)", MIT campus, Anna University	04.03.2019 to 05.03.2019	Department of Instrumentation Engineering, MIT Campus, Anna University
4.	Mrs.C.Sridevi Assistant Professor	FDP on Geometry, Imaging and Parallel Computing Techniques for Cancer Treatment	10.06.2019 to 15.06.2019	National Institute of Technology, Calicut.
5.	Mrs.S.Alagu Teaching Fellow	FDP on Geometry, Imaging and parallel computing Techniques	10.06.2019 to 15.06.2019	NIT Calicut.
6.	Mrs.G.Sumithra Assistant Professor	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
7.	Dr.K.Mariammal Asst. Prof.	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
8.	Mr.G.Balamurugan Asst. Prof.	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
9.	Mrs.A.Divya Asst. Prof.	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
10.	Mr.J.Logeswaran Teaching Fellow	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
11.	Mr.K.Veerappan Teaching Fellow	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
12.	Ms.P.Kasthuri Teaching Fellow	AICTE-FDP-Student Induction Programme	13.05.2019 to 15.05.2019	SIP Cell, CEG, Anna University
13.	Mrs.G.Sumithra Assistant Professor	AICTE-FDP-Student Induction Programme	20.05.2019 to 26.05.2019	Crescent University, Vandalur
14.	Dr.K.Mariammal Asst. Prof.	AICTE-FDP-Student Induction Programme	20.05.2019 to 26.05.2019	Crescent University, Vandalur
15.	Mr.G.Balamurugan Asst. Prof.	AICTE-FDP-Student Induction Programme	10.06.2019 to 16.06.2019	SIP Cell, CEG, Anna University
16.	Mrs.A.Divya Asst. Prof.	AICTE-FDP-Student Induction Programme	10.06.2019 to	SIP Cell, CEG, Anna University

			16.06.2019	
17.	Mr.J.Logeswaran Teaching Fellow	AICTE-FDP-Student Induction Programme	20.05.2019 to 26.05.2019	Crescent University, Vandalur
18.	Mr.K.Veerappan Teaching Fellow	AICTE-FDP-Student Induction Programme	20.05.2019 to 26.05.2019	Crescent University, Vandalur
19.	Ms.P.Kasthuri Teaching Fellow	AICTE-FDP-Student Induction Programme	20.05.2019 to 26.05.2019	Crescent University, Vandalur

6.2. Conferences / Seminars / Symposium attended by the Faculty Members of Anna University at **International Level** during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Faculty Name and Designation</b>	<b>Name of the Programme attended</b>	<b>Name of the Country visited</b>	<b>Name of Travel grant used</b>	<b>Date</b>
	Nil	Nil	Nil	Nil	Nil

6.3. Lectures delivered by the Anna University Faculty members at other Institute during the period  
**01.07.2018 to 30.06.2019**

Sl. No.	Faculty Name	Designation	Name of the programme	Address of Organized Institute	Date
1.	Dr. V. Sathiesh Kumar	Assistant Professor	<b>Faculty development program</b> Topic: Real Time applications of ARM processor	St. Joseph's College of Engineering/Department of ECE	04.07.2018
2.	Dr. V. Sathiesh Kumar	Assistant Professor	<b>Workshop</b> Topic : Image Processing using MATLAB	KCG College of Technology/Department of ECE	06.07.2018
3.	Dr. V. Sathiesh Kumar	Assistant Professor	<b>Workshop</b> Topic: Embedded Software tools - Proteus, MikroC Pro and Programming Node MCU	Kamaraj College of Engineering and Technology/Dept. of ECE	03.08.2018 & 04.08.2018
4.	Dr.S.P.Joy Vasantha Rani	Associate Professor	Guest lecture on PIC microcontroller	Prince shri Venkateshwara Padmavathy Engg. College, Chennai	13.08.2018
5.	Dr.P.Indumathi	Professor	Guest Lecture on Digital Communications	DMI college of Engineering, Chennai	14.08.2018
6.	Dr.K.Mariammal	Assistant Professor (Sr.Gr)	Lecture on "Signals and System" for II year and III year B.E (ECE Students)	GKM College of Engineering and Technology, Chennai, Tamil Nadu, India	14.08.2018
7.	Dr.M.Ganesh Madhan	Professor	Faculty Development Program on Advanced Communications	National Institute for Teacher Training and Research, Taramani	23.08.2018
8.	Dr.K.Mariammal	Assistant Professor (Sr.Gr)	Lecture on "Digital Signal Processing" for III Year IT B.Tech students	Loyola Institute of Technology, Chennai, Tamil Nadu, India	23.08.2018
9.	Mrs.A.Divya	Assistant Professor	Guest Lecture - Digital Principles and System Design	Loyola Institute of Technology (CSE), Palanchur Nazerethpet , Chennai	06.09.2018
10.	Mrs.A.Divya	Assistant Professor	Guest Lecture - Signals and Systems	Loyola Institute of Technology (CSE), Palanchur Nazerethpet , Chennai	11.09.2018
11.	Dr.S.Piramasubramanian	Asst.Professor. (Sr.Gr)	Lecture on "Waves and Fiber Optics" in CSIR Sponsored National Seminar	Rajalakshmi Institute of Technology, Chennai,	13.10.2018

			on "Engineering Design and Technical Applications of Physics"		
12.	Dr.M.Ganesh Madhan	Professor	Faculty Development Training Program on (EC 6801) Wireless communication	St.Josephs College of Engineering,OMR Chennai 600 119.	05.12.2018
13.	Dr.M.Ganesh Madhan	Professor	ISRO Sponsored National Seminar on Energy harvesting antenna for satellite applications	SRM Easwari Engineering College , Ramapuram,Chennai.	06.12.2018
14.	Dr. V. Sathiesh Kumar	Assistant Professor	<b>Guest Lecture</b> Topic: Image classification using Supervised and Unsupervised models	VelMultitech/Dept. of Biomedical Engineering	12.02 2019
15.	Dr. V. Sathiesh Kumar	Assistant Professor	<b>Workshop</b> Topic: Image Processing and Machine Learning using Python	St.Joseph College of Engineering/Dept. of ECE	07.03.2019 & 08.03. 2019
16.	Dr.K.Mariammal	Assistant Professor (Sr.Gr)	Lecture on "Digital Signal Processing-Finite Word Length Effects" for III year B.E CSE students	DMI College of Engineering, chennai, Tamil Nadu, India	11.03.2019
17.	Dr.K.Mariammal	Assistant Professor (Sr.Gr)	Lecture on "Communication Theory" for B.E ECE Students organized by Kancheepuram,	University College of Engineering, Kancheepuram, Tamil Nadu, India	20.03.2019
18.	Dr.P.T.V.Bhuvanewari	Professor	FDTP on Cognitive Radio	Velammal Engineering College	08.05.2019
19.	Dr. V. Sathiesh Kumar	Assistant Professor	<b>FDP</b> Topic : Introduction to Embedded Computing	Agni College of Technology/Dept. of ECE	13.05.2019
20.	Dr.M.Ganesh Madhan	Professor	Anna University sponsored Faculty Development Training program on Digital Communications	National Engineering College, Kovilpatti	01.06.2019

6.4 Honours / Awards received from State / National / International bodies by the AU Faculty Members during the period **01.07.2018 to 30.06.2019**

<b>Sl. No.</b>	<b>Name of the Faculty Member</b>	<b>Designation</b>	<b>Name of the Honours / Awards</b>	<b>Name of the Institute / Organization issued the Honours / Awards</b>
1.	Dr.P.Indumathi	Professor	Best paper Award	The international conference PECCOMET 2019 sponsored by Springer conducted by Panimalar Engineering College
2.	Dr.G.Kavitha	Associate Professor	Grant of Young faculty research fellowship (YFRF) Award - January 2019	Visvesvaraya Ph.D Programme of Ministry of Electronics & Information Technology, Meity, Government of India

7) Details of Visitors to the Departments/Centres/Institute other than Anna University Faculty during the period **01.07.2018 to 30.06.2019**

Sl. No.	Name of the visitor	Designation	Address of office / organization	Purpose of Visit	Date of visit
1	Mr. R. Sridhar	General Manager (ATM- R&D)	Airports Authority of India, Air traffic Services Complex, Chennai Airport, Chennai -600 027	Guest Lecture for Students	4 <sup>th</sup> Sep 2018
2	Mr. Karthick Rajapandiyar	Principal Project Manager	Nokia 4th Floor, TVH Agnitio Park, 141, OMR, Kandanchavadi, Chennai-96	5G Workshop	1 <sup>st</sup> Feb 2019
3	Mr. Ashwinth	Data analyst	Morgen stanley 208, ABC, Apeejay House, 39/12, Haddows Rd, Chennai, Tamil Nadu 600006	Workshop on Machine Learning and AI	1 <sup>st</sup> Feb 2019
4	Mr. A. Sanjeev & Mr. S. Prasanth	Application Engineer	Cypress semiconductors 65/2, Bagmane Tech Park, Block C, Bagmane Laurel, C V Raman Nagar, Bengaluru, Karnataka 560093	Workshop on PsoC	1 <sup>st</sup> Feb 2019
5	Mr. Rajesh Thanaseelan	Data Science Consultant	DXC Technologies 116, Inner Ring Rd, SIDCO Industrial Estate, Guindy, Chennai, 600032	Workshop on Self driving cars using deep learning	2 <sup>nd</sup> Feb 2019
6	Mr. Vasanth Kumar & Mr. Visveswaran	Technical Experts	National Instruments 81/1 & 82/1, Salarpuria Softzone Wing B, 5th Floor, Block A Bellandur, Varthur Hobli Bangalore 560 103, Karnataka	Hands on Training on Labview	14 <sup>th</sup> and 15 <sup>th</sup> Feb 2019



8) New Equipment / Instruments purchased costing more than **Rs.1.00 lakh** during the period **01.07.2018 to 30.06.2019**

Sl. No.	Name of the New Equipment / Instrument purchased	Uses of Equipment / Instrument	Purchase cost (more than One Lakh)
1.	Digital 4 Channel Oscilloscope (5 Nos.)	Will Provide <ul style="list-style-type: none"> <li>• Measurement of analog signals up to 70 MHz and to identify digital waveforms in 16 channels</li> <li>• Details of analog signals such as Amplitude and frequency.</li> <li>• Details of digital signals such as timing information, glitch etc.</li> <li>• Simultaneous analog and digital characteristics for ADC and DAC analysis.</li> <li>• Synchronous and time correlation between analog and digital signals.</li> </ul>	8,89,970/-
2.	Vibration Free Optical Work Bench	Used to hold pulsed laser system and supporting optics	1,88,265/-
3.	LAB VIEW Software (NI)	For Research Purpose	4,72,231/-
4.	CST Studio Suite Software (2 seats + 3 free)	High performance 3D Electro Magnetic (EM) analysis software for UG & PG laboratory and for research purpose also.	6,50,014/-
5.	Nexys Video Artix-7 FPGA : Trainer Board for Multimedia Applications with associated Xilinx Software along with ZedBoard Zynq-7000 ARM/FPGA SoC Development Board	For Research Purpose	1,74,578/-

9) Research Papers Presented in **National** Conferences / Seminars / Symposium / Workshop during the period **01.07.2018 to 30.06.2019**

Sl. No.	Faculty Name and Designation	Title of the Paper presented	Name of the Conference and Venue	Date
1.	M Ganesh Madhan, Professor	Development of a patch antenna based dielectric constant measurement system for S band Microwave frequencies	National Symposium on Instrumentation, JSS Science and Technology University, Mysore	July 13-14,2018
2.	Dr.G.Kavitha Associate Professor	Assessment of cardiovascular disorders based on 3D left ventricle model of cine cardiac MR sequence”, [In: Satapathy S., Raju K., Shyamala K., Krishna D., Favorskaya M. (eds) Advances in Decision Sciences, Image Processing, Security and Computer Vision. ICETE 2019. Learning and Analytics in Intelligent Systems, vol 3. Springer, Cham]	2 <sup>nd</sup> National Conference on Cyber Security, Image Processing, Graphics, Mobility & Analytics (NCCSIGMA – 2k19), CMR Technical Campus, Hyderabad,	24 <sup>th</sup> & 25 <sup>th</sup> Jan 2019
3.	Dr.S.Vasuhi, Associate Professor	Energy Efficiency Improvement in WSN through Software Defined Network	5 <sup>th</sup> National Conference on “Recent Trends in Instrumentation and Control (RTIC-2019)”, Department of Instrumentation Engineering, MIT Campus, Anna University	4 <sup>th</sup> and 5 <sup>th</sup> March 2019
4.	Dr.S.Vasuhi Associate Professor	Hybrid Resource Allocation Approach for Cognitive Visible Light Communication	5 <sup>th</sup> National Conference on “Recent Trends in Instrumentation and Control (RTIC-2019)”, Department of Instrumentation Engineering, MIT Campus, Anna University	4 <sup>th</sup> and 5 <sup>th</sup> March 2019
5.	Dr. V. Sathiesh Kumar	Plant species recognition using Modified LeNet-5 CNN Architecture	National conference on Recent Trends in Instrumentation and Control (RTIC-2019), Dept. of Instrumentation Engineering, MIT Campus, Anna University	4 <sup>th</sup> and 5 <sup>th</sup> March 2019
6.	Dr. V. Sathiesh Kumar	Optical based instrumentation setup to detect potassium under high pressure condition	National conference on Recent Trends in Instrumentation and Control (RTIC-2019), Dept. of Instrumentation Engineering, MIT Campus, Anna University	4 <sup>th</sup> and 5 <sup>th</sup> March 2019

7.	Dr.S.Vasuhi Associate Professor	Design and Analysis of TRI-BAND Hybrid Antenna for WLAN / WiMAX Applications	National Conference on Information and Communication Technologies 2019, SSN College of Engineering, Chennai	1 <sup>st</sup> and 2 <sup>nd</sup> April 2019
8.	Dr.M Ganesh Madhan, Professor	Design and Development of Carbon filled PDMS Substrate based wearable antenna”	National conference on Signal processing, communication and VLSI Design(NCSV'19), Anna University Regional centre, Coimbatore	4 <sup>th</sup> & 5 <sup>th</sup> April 2019
9.	Dr.G.Kavitha Associate Professor	Detection of degree of abnormality in cardiac magnetic resonance images with segmented left ventricle and deep convolutional neural network, pp. 115-119. ISBN: 978-93-87862-64-7	11 <sup>th</sup> National Conference on Signal processing, Communication & VLSI design (NCSCV'19), Anna University, Regional Campus, Coimbatore,	4 <sup>th</sup> & 5 <sup>th</sup> April 2019
10.	Dr.G.Kavitha Associate Professor	Study of symmetry variation and severity detection in MR brain images using crow search optimization based threshold and DSIFT detectors”, pp. 250-254. ISBN: 978-93-87862-64-7	11 <sup>th</sup> National Conference on Signal processing, Communication & VLSI design (NCSCV'19), Anna University, Regional Campus, Coimbatore,	4 <sup>th</sup> & 5 <sup>th</sup> April 2019
11.	Mr. J. Logeswaran Teaching Fellow	Design and development of a carbon filled PDMS substrate based wearable antenna	11 <sup>th</sup> National Conference on Signal Processing, Communication and VLSI Design & Anna University, Regional Campus - Coimbatore	4 <sup>th</sup> & 5 <sup>th</sup> April 2019

10) Research Papers Presented in **International** Conferences / Seminars / Symposium / Workshop during the period **01.07.2018 to 30.06.2019**

Sl. No.	Faculty Name and Designation	Title of the Paper presented	Name of the Conference and Venue	Date
1.	Dr.S.Vasuhi, Associate Professor	Smart Control of Photo Voltaic System with Priority Based Load Scheduling	126 <sup>th</sup> The IRES International Conference, Amsterdam, Netherlands	09.07.2018 To 10.07.2018
2.	Dr.S.Piramasubramanian, Dr.M.Ganesh Madhan and V.Murugan, Vignesh	"Design and Development of Planar Antennas for Wearable Sensor Applications	"International Conference on Advances in Materials and Manufacturing Applications", Amrita Vishwa Vidyapeedam University, Bangalore,India	16.08.2018 to 18.08.2018
3.	Dr.S.Piramasubramanian, Dr.M.Ganesh Madhan, U.Bhanu Chander, P.Prakash	"Effect of Added Dielectric Thickness on the Performance of Patch Antenna"	"International Conference on Advances in Materials and Manufacturing Applications", Amrita Vishwa Vidyapeedam University, Bangalore,India	16.08.2018 to 18.08.2018
4.	Dr.S.Vasuhi, Associate Professor	Liveliness Detection in Real Time Videos using Color based Chromatic Moment Feature	International Conference on Recent Trends in Advance Computing (ICRTAC), Vellore Institute of Technology, Chennai,	10.09.2018 to 11.09.2018
5.	Dr. V. Sathiesh Kumar Asst. Professor	A study on plant recognition using conventional image processing and deep learning approaches	Fourth International Symposium on Intelligent Systems Technologies and Applications (ISTA 18)	19.09.2018 to 22.09.2018
6.	Dr. V. Sathiesh Kumar Asst. Professor	Design and Implementation of in-situ Human-Elephant conflict management system	Fourth International Symposium on Intelligent Systems Technologies and Applications (ISTA 18)	19.09.2018 to 22.09.2018
7.	Dr.M.Ganesh Madhan, A.G.Sanjeev and Dr.S.Piramasubramanian	A comparative study of RPG missile modeling for radar cross section analysis at 10 GHz M	"International Conference on Applied Electromagnetics, Signal Processing and Communication", Kalinga Institute of Industrial Technology, India	22.10.2018 to 24.10.2018
8.	Dr.M Ganesh Madhan, Professor	Analysis of horn antenna calibration as per SAE-ARP958D standard and three antenna method prescribed by ANSI C63.5 standard	International conference on Electromagnetic Interference and compatibility. NIMHANS conventional centre Bangalore.	13.11.2018 to 16.11.2018
9.	Dr.S.P.Joy Vasantha Rani Associate Professor	Adaptive Particle swarm optimization based wirelength minimization for placement in FPGA	International conference on computational vision and bioinspired computing (ICCVBIC), RVS technical campus, Coimbatore	29.11.2018 to 30.11.2018
10.	Dr.M Ganesh Madhan, Professor	Numerical Analysis of Temperature Dependent Short pulse generation in Mid infrared QCL	International Symposium on Semiconductor materials and devices. Visvesvaraya National Institute of Technology (VNIT), Nagpur	30.11.2018 02.12.2018

11.	Dr.M Ganesh Madhan, Professor	Graphene based Micro strip antenna for triple and quad band operation at Terahertz frequencies	International Symposium on Semiconductor materials and devices. Visvesvaraya National Institute of Technology (VNIT), Nagpur	30.11.2018 02.12.2018
12.	Dr.M Ganesh Madhan, Professor	Theoretical investigation on short pulse generation in Mid infrared Quantum cascade lasers	Photonics 2018 The International Conference on Fiber optics and Photonics IIT Delhi.	12.12.2018 to 15.12.2018
13.	Dr. G. Kavitha Associate Professor	Detection of Dementia From Brain Tissues Variation In MR Images Using Minimum Cross Entropy Based Crow Search Algorithm And Structure Tensor Features	International conference on soft computing for problem solving, VIT Vellore	17.12.2018 to 19.12.2018
14.	Dr.P.Indumathi Professor	SVD based Linear Precoding using Channel Estimation for MIMO-OFDM systems	Third International Conference on Intelligent Communication, Control and Devices 2018, University of Petroleum and Energy Studies, Dehradun ( <b>Presentation through Skype</b> )	21.12.2018 and 22.12.2018
15.	Dr.P.Indumathi Professor	Improved Spectrum and Traffic aware Routing protocol for Cognitive Radio Based VANET	"Third International Conference on Advanced Computing and Intelligent Engineering",, Siksha 'O' Anusandhan Deemed to be University, Bhubaneswar, India ( <b>Presentation via Skype</b> )	22.12.2018 to 24.12.2018
16.	P.Prakash Associate Professor	Multilevel Modulation Format Conversion using Delay -Line Filter	International level conference on World Symposium on Communication Engineering, organised by WSCE, Singapore	28.12.2018
17.	Dr.S.P.Joy Vasantha Rani Associate Professor	Design of Logic blocks with increased efficiency for FPGA	Second International Conference on Signals, systems and communication, Anna University Chennai	07.01.2019 to 09.01.2019
18.	Dr.S.P.Joy Vasantha Rani Associate Professor	Efficient routing algorithm for FPGA	Second International Conference on Signals, systems and communication, Anna University Chennai	07.01.2019 to 09.01.2019
19.	Dr.K.Mariamammal Asst. Prof.	Design of Configurable Adder and its Application to Filtering-  Thendral.T.R and Mariammal K <b>Presented by- Thendral.T.R</b>	ICSSC-2019 - 2nd International Conference on Signals Systems and Communication, organised by Department of ECE, CEG Campus, Anna University, India	07.01.2019 to 09.01.2019

20.	Dr.K.Mariammal Asst. Prof.	VLSI Implementation of Frame Compression Using Efficient Coders-  Banusha Chandran and Mariammal.K, <b>Presented by-</b> Banusha Chandran	ICSSC-2019 - 2nd International Conference on Signals Systems and Communication, organised by Department of ECE, CEG Campus, Anna University, India	07.01.2019 to 09.01.2019
21.	Dr.K.Mariammal Asst. Prof.	VLSI Implementation of Transforms-  Sahaana.G and Mariammal K <b>Presented by-</b> Sahaana.G	ICSSC-2019 - 2nd International Conference on Signals Systems and Communication, organised by Department of ECE, CEG Campus, Anna University, India	07.01.2019 to 09.01.2019
22.	Mr.G.Balamurugan Assistant Professor	Joint Adaptive Modulation And Chaotic Channel Switching For Wireless Body Area Network	2nd International Conference on Signals, Systems and Communication ICSSC 2019, CEG, Anna University, Chennai	07.01.2019 to 09.01.2019
23.	Mr.G.Balamurugan Assistant Professor	Underwater Live Fish Recognition using Deep Learning Model	2nd International Conference on Signals, Systems and Communication ICSSC 2019, CEG, Anna University, Chennai	07.01.2019 to 09.01.2019
24.	Dr. V. Sathiesh Kumar Asst. Professor	Performance analysis of Convolutional Neural Network (CNN) based Cancerous Skin Lesion Detection System	International Conference on Computational Intelligence in Data Science (ICCIDS- 2019), Dept. of Computer Science and Engineering, SSN College of Engineering	21.02.2019 to 23.02.2019
25.	Dr. V. Sathiesh Kumar Asst. Professor	Performance analysis of Epileptic Seizure Detection System using Neural Network Approach	International Conference on Computational Intelligence in Data Science (ICCIDS- 2019), Dept. of Computer Science and Engineering, SSN College of Engineering	21.02.2019 to 23.02.2019
26.	Dr. V. Sathiesh Kumar Asst. Professor	Region based Convolutional Neural Network for Human- Elephant Conflict Management System	International Conference on Computational Intelligence in Data Science (ICCIDS- 2019), Dept. of Computer Science and Engineering, SSN College of Engineering	21.02.2019 to 23.02.2019
27.	Mrs.A.Divya, Assistant professor	Lung Cancer Detection and Segmentation using Convolutional Neural Network	7th International conference on Contemporary engineering and technology 2019, Prince shri Venkateswara padmavathy Engg. College , chennai	09.03.2019 to 10.03.2019
28.	Mrs.A.Divya, Assistant professor	Neural Network for Identification and Classification of Plant Leaf Diseases	5th international conference on science technology engineering and mathematics, Jeppiaar Engg. College, Chennai	14.03.2019 to 15.03.2019
29.	Mr. J. Logeswaran Teaching Fellow	Electrical Equivalent model for microstrip patch antenna	5 <sup>th</sup> International conference on Science Technology engineering and mathematics, & Jeppiaar Engg. College, Chennai	14.03.2019 to 15.03.2019

30.	B.Pradeepa, A.Viji, J.Joshan Athanesious &V.Vaidehi	Anomaly Detection in Crowd Scenes using Streak flow Analysis	IEEE international Conference on Wireless Communications, Signal Processing and Networking (WiSPNET) held at SSN College of Engg. Chennai,	21.03.2019 to 23.03.2019
31.	K.Meena, Dr.A.Viji, J.Joshan Athanesious &V.Vaidehi	Detecting Abnormal Event In Traffic Scenes Using Unsupervised Deep Learning approach	IEEE international Conference on Wireless Communications, Signal Processing and Networking (WiSPNET) held at SSN College of Engg., Chennai,	21.03.2019 to 23.03.2019
32.	Dr.P.Indumathi Professor	Study of various algorithms on PAPR reduction in OFDM system	"International Conference for Phoenixes on Emerging Current Trends in Engineering and Management (PECCOMET2019)" in Panimalar Engg. College	22.03.2019 and 23.03.2019
33.	Dr.P.Indumathi Professor	Design of Modified Codeword for Space Time Block coded Spatial Modulation	"International Conference for Phoenixes on Emerging Current Trends in Engineering and Management (PECCOMET2019)" in Panimalar Engg. College <b>(Presented with Best Paper Award)</b>	22.03.2019 and 23.03.2019
34.	Dr.P.Prakash Associate Professor	Analysis of Electronic Dispersion Compensation for 10GBPS using Equalizer	IEEE international Conference on Innovation in Power and Advanced Computing Technologies.	23.03.2019
35.	Mrs.Vineetha Mathai Teaching Fellow	Performance Evaluation of Secured Co-Operative Cognitive Radio Networks using Diversity Combining Techniques	IEEE International Conference on Innovations in Communication, Computing and Instrumentation, Easwari Engg. College Chennai	23.03.2019
36.	Dr.M Ganesh Madhan, Professor	Capacity enhancement of free space optical transmission system using novel channel coding schemes",	Workshop on Optics and Photonics: Theory and Computational Techniques, IIT Delhi	23.03.2019 to 24.03.2019
37.	Dr.K.Mariammal Asst. Prof.	Design of Adaptive FIR Filter for Biomedical Applications"	Jawahar Engineering College, Chennai, India	24.03.2019
38.	Dr.K.Mariammal Asst. Prof.	Design and Analysis of FIR Filter using MCM Technique for Audio Application	Jawahar Engineering College, Chennai, India	24.03.2019
39.	Dr.K.Mariammal Asst. Prof.	Design and Analysis of Adders and its Application to Filtering	Jawahar Engineering College, Chennai, India	24.03.2019
40.	Dr.K.Mariammal Asst. Prof.	Rice Grain Quality Assessment	International Conference on Advanced Scientific Innovation in Science, Engg. and Technology, organised by Bharath	19.04.2019 to 23.04.2019

			Institute of Higher Education and Research, India	
41.	Dr. V. Sathiesh Kumar Asst. Professor	Design and Development of FPGA based automation circuit for Antibioqram Device	International Conference on Recent Trends in Electronics, Computing and Communication Engineering 2019 (ICRTECC2019), Saveetha School of Engineering	25.04.2019 to 26.04.2019
42.	Dr. V. Sathiesh Kumar Asst. Professor	Face-Spoof detection system using convolotional neural network	International Conference on Recent Trends in Electronics, Computing and Communication Engineering 2019 (ICRTECC2019), Saveetha School of Engineering	25.04.2019 to 26.04.2019
43.	Mrs.S.Alagu Teaching Fellow	Acute Lymphoblastic Leukemia Diagnosis in microscopic blood smear images using Texture features and SVM classifier	Alliance International conferece on Artificial Intelligence and Machine Learning	26.04.2019 to 27.04.2019



11) Books / Journals Published during the period **01.07.2018 to 30.06.2019**

a. Books published

<b>Sl. No.</b>	<b>Name of the Book / Title</b>	<b>Author's Name</b>	<b>Name of the Publisher</b>	<b>Month &amp; Year</b>
1.	NIL			

b. Journals published

Sl. No.	Name of the Title	Author's Name	Name of the Publisher	Month & Year
1.	Regression model for seamless mobility in LTE-A HetNets	A. Saraswathi Priyadharshini P.T.V. Bhuvaneswari	Transactions on Emerging Telecommunications Technologies, John Wiley & Sons, PP. 1-19	June 2018
2.	Diagnostic feature automation and diagnostic tool for In-Vehicle infotainment (IVI) System	Deepti Susan John, V. Sathiesh Kumar, Prasath Ramalingam and Manikandan Murugesan	International Journal of Pure and Applied Mathematics	July, 2018
3.	Region splitting-based resource partitioning to enhance throughput in long term evolution - Advanced networks	S.Ezhilarasi and Bhuvaneswari P.T.V	Computers and Electrical Engineering, Elsevier, Vol 71, pp. 294-308	August 2018
4.	Vertical cavity surface emitting laser based hybrid fiber- free space optic link for passive optical network applications	K.Muralikrishna and M.Ganesh Madhan	OPTIK, Elsevier,GmbH	October 2018
5.	Particle Swarm Optimization approach to identify optimum electrical pulse characteristics for efficient Gain Switching in Dual Wavelength Quantum Cascade Lasers	P.Ashok and M.Ganesh Madhan	OPTIK, Elsevier,GmbH	October 2018
6.	Symmetric Uncertainty Based Search Space Reduction for Fast Face Recognition	C. Sweetlin Hemalatha, Vignesh Sankaran, Vaidehi V, Shree Nandhini, S.Vasuhi	International Journal of Intelligent Information Technologies, published by IGI Global. Vol. 14, Issue 4, pp. 77 - 97 ISBN : 1548-3657, 1548-3665, Impact Factor : 0.57	October 2018
7.	An ADC BIST using on-chip ramp generation and digital ORA	Senthil Sivakumar, M., Joy Vasantha Rani, S.P.	Microelectronics Journal, Elsevier Vol.81, pp. 8-15	Nov. 2018
8.	A non-invasive method for rotor bar fault diagnosis in three-phase squirrel cage induction motor with advanced signal processing technique	Madhusudhana Reddy Barusu , Umamaheswari Sethurajan, Meganathan D	Journal of Engineering IET Press	Nov. 2018
9.	An Improved ANFIS with Aid of ALO Technique for THD Minimization of Multilevel Inverters.	Francis, R. and Meganathan.D	Journal of Circuits, System and Computers, World Scientific	Nov.2018
10.	Study on Cholesterol contents using Laser induced breakdown spectroscopy	Indu R, Radha S, Sathiesh Kumar V, Manikandan E, Sreeja B. S, Sumathi J	Sensor Letters	December, 2018
11.	A Novel DDS Architecture for Dynamic Reconfigurable Three Phase Induction Motor Drive	Roy Francis, Meganathan D	Journal of Electrical Engineering	December, 2018

12.	Performance Analysis of CSRZ-DQPSK Transmitter Configurations for SBS Tolerance in Single Mode Fiber Link	Rimmya Chitravelu , Ganesh Madhan M	OPTIK, Elsevier, GmbH	January 2019
13.	Assessment of severity in neuropsychiatric disorders based on radiomic features with prior shape level set and metaheuristic algorithms.	Latha M, and Kavitha G.	Int J Imaging Syst Technol. 2019; 1–12. <a href="https://doi.org/10.1002/ima.22306">https://doi.org/10.1002/ima.22306</a> , Wiley	Jan 2019
14.	Survey on AES and Whirlpool Cryptographic Architectures	Vignesh. O, Rajakumari.V, Divya. A	International journal of electronics engineering (IJEE)	Jan 2019
15.	Performance evaluation of remote millimeter wave generation in a digital optical link incorporating a gain switched vertical cavity surface emitting laser	K.Muralikrishna and M.Ganesh Madhan	Opto electronics and Advanced materials, INOE publishers	February 2019
16.	Trajectory based abnormal event detection in video traffic surveillance using general potential data field with spectral clustering	Athanesious, S. Sibi Chakkaravarthy, S. Vasuhi, V. Vaidehi,	Multimedia Tools and Applications, pp. 1- 17. Print ISSN1380-7501, Online ISSN1573-7721,	February 2019
17.	Diagnosis of Bearing Outer Race Faults Using a low-cost non-contact method with Advanced Wavelet Transforms . Vol.25, No.1, pp.44-53,2019	Madhusudhana Reddy Barusu , Umamaheswari Sethurajan, Meganathan D	Journal of Elektronika ir Elektrotechnika,	February 2019
18.	Dual-Band Beam Tilting Antenna with Low Profile Negative Refractive Index Metamaterial	A.Kamalaveni and M.Ganesh Madhan	IET Microwaves, Antennas & Propagation	March 2019
19.	Efficient Use of On-Chip Memories and Scheduling Techniques to Eliminate the Reconfiguration Overheads in Reconfigurable Systems	I Hariharan & M Kannan	Journal of Circuits, Systems & Computers	March 2019
20.	Reducing Reconfiguration Overheads Using ConfigurationPrefetch, Optimal Reuse, and Optimal Memory Mapping	I Hariharan & M Kannan	National Academy of Sciences	March 2019
21.	Design and Implementation of in-situ Human-Elephant conflict management system	Jagannathan S, Sathiesh Kumar V and Meganathan D	Journal of Intelligent and Fuzzy Systems	March, 2019
22.	A study on plant recognition using conventional image processing and deep learning approaches	Anubha Pearline S, Sathiesh Kumar V and Harini S	Journal of Intelligent and Fuzzy Systems	March, 2019
23.	Survey on Floating Point Fused Multiply Add	O. Vignesh, V. Janakipriya, A. Divya	International Journal of Research and Analytical Reviews (IJRAR)	March 2019
24.	Hardware Implementation of FFT/IFFT Algorithms Incorporating Efficient	E. Konguvel & M. Kannan	Springer – Journal of Electrical Engineering & Technology	April 2019

	Computational Elements			
25.	Autonomous Tracking of Portable Drinking Water System	P.T.V.Bhuvanewari, V.Dhivya, G.Indu, P.Vijayalakshmi and V.Ramachandran	International Journal of Research in Electronics and Computing Engineering, Vol.7, Issue 2, pp. 2350-2357	April 2019
26.	Hardware design implementation issues of the estimatorbased controller using FPGA	Kanthimathi R., Kamala J., Jaibalaganesh T. and Vasuhi S.,	International Journal of Electronics, Taylor & Francis Group Vol. 106, Issue 7 \PP. 1 – 17, 2019. ISSN: 0020-7217 (Print) 1362-3060 (Online) <b>Impact Factor</b> : 0.939	April 2019
27.	Cmantec Neural Network Algorithm Based Classification of Mammograms Using Slbp	J. Jeya Caleb & M. Kannan	Journal of Electrical Engineering	May 2019
28.	Analysis of nonlinear distortion and its reduction using feedback injection schemes in an 1.3 $\mu$ m transistor laser	S.V.Vinodhini, S.Piramasubramanian and M.Ganesh Madhan	Optics Communication,Elsevier	May 2019
29.	Design and Analysis of FIR Filter Using MCM Technique for Audio Application	Banusha Chandran and Mariammal.K,	International Journal of Scientific Research and Review	Volume 8, Issue 5, May 2019
30.	Automatic fault isolation and restoration of distribution system using JADE based Multi-Agents	Indhumathi CHELLASWAMY, Joy Vasantha Rani SP	Turkish Journal of Electrical Engineering & Computer Sciences, TUBITAK, Vol. 27, pp.2226-2242	May 2019
31.	Performance Evaluation of Relay Selection Methods in Cooperative Networks using Diversity Techniques	Vineetha Mathai, R.Radhika, P. Indumathi	International Journal of Management, Technology And Engineering	May 2019
32.	A dual-mode cascaded H-bridge multilevel inverter for improving THD	Roy Francis, D.Meganathan	Journal of Electrical Engineering, Springer	June 2019
33.	Single-Event-Hardened Timing Generator for waveform digitizer based readout electronics	S.Balaji, D.Meganathan and S.Ramasamy	IOP Press	June 2019
34.	A Novel Ultra-Low Power 6T/8T SRAM Design Using 9nm Heterojunction Tunnel Field-Effect Transistors	Jagadeeshkumar.N, Meganathan.D	International Journal of Management, Technology and Engineering	June 2019
35.	Efficient design of ADC BIST with an analog ramp signal generation and digital error estimation	Senthil Sivakumar, M., Joy Vasantha Rani, S.P.	Journal of Circuits, Systems and Computers, World Scientific, 28(3)	2019

c. Patents obtained

<b>Sl. No.</b>	<b>Title of the Patent</b>	<b>Inventors</b>	<b>Patent Number</b>	<b>Patent organization</b>	<b>Month &amp; Year</b>
1.	Device and methods for determining the elemental identity and analysis on moving target from a variable stand-off distance.	V. Sathiesh Kumar, Nilesh J. Vasa, R. Sarathi	314839	IIT Madras	27.06.2019 (Date of Grant) 09.10.2013 (Date of Filing)

12. List of achievements during the period **01.07.2018 to 30.06.2019**

1. Certificate of reviewing awarded to Dr.G.Kavitha, Associate Professor during October 2018 in recognition of the review contributed to the Journal - "Optik" Elsevier.
2. Certificate of reviewing awarded to Dr.G.Kavitha, Associate Professor during April 2019 in recognition of the review contributed to the Journal - "Informatics in Medicine Unlocked " Elsevier.
3. Best Paper awarded to Dr.P.T.V.Bhuvaneshwari in International conference on Emerging Current Trends in Computing and Expert Technology (COMET 2K19)

Additional Detail:

1. **Dr.G.Kavitha, Associate Professor, Completed one Ph.D student Mrs. J.Thamil selvi as Joint Supervisor.** Title of the thesis: " Extraction and validation of Edge maps for Breast thermal image segmentation using Level sets", Viva conducted on 12.10.2018.