



PRAGATI ENGINEERING COLLEGE

1-378, ADB Road, Surampalem-533437

(Approved by AICTE, Permanently Affiliated to JNTUK, KAKINADA)

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Research and Development A.Y 2019-20

PATENT DETAILS

S.No	Title of the invention	Publication date	Publication /Application number	Name of the faculty
1	Method and device for monitoring the critical parameters of oil pipe line	16/12/2019	49/2019	Mr.Ch.Lakshminarayana
2	Design of a textile array antenna	16/09/2019	201941036705 A	Mr.D.Natraj

BOOK CHAPTER PUBLICATION DETAILS

S.No	Published a Book chapter	Book titled	Publisher	Chapter ID:	Name of the faculty
1	on Development of Solar Energy Harvesting Mechanism to Power up Sensor Node to Monitor the Parameters of Pipeline Using XBEE Technology	“Energy Harvesting Technologies for Powering WPAN and IOT Devices for Industry 4.0 Up-Gradation”	Nova Science publications	chapter ID is 61663	Ch. Lakshmi Narayana
2.	on Analysis and Design of Oil Pipeline Leaks Monitoring System Using LORA and IOT Network	“LoRA and IOT networks for Applications in Industry 4.0”	Nova Science publications.	Chapter ID: 62213, Book ID: 16674	

JOURNAL PUBLICATIONS

S. No	Name of the faculty	Title of the Paper	Name of the Journal	VOLUME & ISSN No	Month & Year
1.	Mrs.P.Sunitha	Speech Enhancement based on Wavelet Thresholding the Multi-tape r Spectrum Combined with Noise Estimation Algorithm	I.J. Image, Graphics and Signal Processing	Volume-11, Issue-9, Page No.44-55,	Sept 2019.
2	Mrs.P.Sunitha	Multiplier –MFCC features for Speech Recognition under noisy environments	IJMECE	Volume No.-7, Issue No.-4, 2321-2152	July 2019
3	Mrs.P.Sunitha	Multi Band Spectral Subtraction Combined with Adaptive Noise Estimation.	IJRTE	Volume-8 Issue-2, Journal 2277-3878 (Online) I.F: 5.92	July 2019.
4	Mrs.P.Sunitha	Improved Spectral Subtraction with Time Recursive Noise Estimation	IJEAT	Volume-8 Issue-5, ISSN: 2249-8958	Scopus Journal, June 2019,
5	Mrs.P.Sunitha	Multi Band Spectral Subtraction for Speech Enhancement with Different Frequency Spacing Methods and their Effect on Objective Quality Measures	I.J. Image, Graphics and Signal Processing	Volume-11, Issue-5, DOI: 10.5815/ijigsp.2019.09.05	May 2019.
6	Mrs.P.Sunitha	Design and implementation of low power 5 stage Pipelined 32 bits MIPS Processor using 28nm Technology	IJITEE	Volume-8 Issue-4S2, ISSN: 2278-3075	March-2019
7	Mr.Ch.Lakshminarayana	Development of Smart Health Monitoring System for patient using IOT Network”.	IJTIMES	Volume 5, Issue 04,	April 2019 UGC
8	Mr.D.Natraj	Design and analysis miniaturized microstrip slot with and without defected ground structured	IJRTE	Volume 8, Issue 11,	Sep 2019 SCOPUS INDEXED
9	Mr.D.Natraj	Four element miniaturizations microstrip antenna array using defected	WEB ENGINEERING	Volume 18, Issue 11, SCIE 1540-9589	NOV 2019

		ground structured satellite applications			
10	Mr.D.Natraj	Defected ground structure based two element micro strip antenna array with reduced mutual coupling	IJEAT	Volume 8,Issue 6, SCOPUS INDEXED	Aug 2019
11	Mrs.B.Vasanth alakshmi	“De-noising of Skin Cancer Images Using Wavelet Thresholding and Analysis of Statistical Performance Metrics	JETIR	Volume 6, Issue 5 ISSN-2349-5162)	May 2019,
12	Mrs.B.Vasanth alakshmi	Design and Implementation of low power 5 stage pipelined 32 bits MIPS Processor using 28 nm Technology	IJITEE	volime-8 Issue-4S2 ISSN:2278-3075	March,2019
13	Mr.V.Prasanth	Dynamic Power Optimization of 32 Bit MIPS Processor Using Clock Gating For Low Power Applications	IJRTE	Volume-8 Issue-2 ISSN: 2277-3878	July 2019
14	Mr.V.Prasanth	Power Optimization Techniques Targeting FPGA – A	IJMECE	Volume No.-7, Issue No.-3, ISSN: 2321-2152	May, 2019
15	Mrs.P.Prasann akumari	Automatic Detection of Tuberculosis using lung CT images and classification by Feed-forward Artificial Neural Network	International Journal of Management, Technology And Engineering	Volume IX, Issue III, ISSN NO : 2249-7455	MARCH/2019
16	Mrs.P.Prasann akumari	Embedded System For Health Care Using SimbleeBoard	International Journal of General Science and Engineering	Volume Issue ISSN 2349 8439	February 2019
17	Mrs.P.Sunitha	Investigation on number of bands in Multi Band Spectral Subtraction for Speech Enhancement and their effect on performance Measures	IJMECE	Volume No.-6, Issue No.-5, ISSN: 2321-2152	September, 2019

18	Mr.D.Natraj	Design and analysis of dual Rhombus Ring micro strip patch Antenna for GPS applications	IJITEE	Volume No.-9, Issue No.-2S3, ISSN: 2278-3075	DEC, 2019
19	Mr.D.Natraj	Design of dual notch UWB MIMO antenna with defected ground structure	IJITEE	Volume No.-9, Issue No.-2S3 ISSN: 2278-3075	DEC, 2019
20	Mr.D.Natraj	Four element miniaturized micro strip antenna array using ground structure for satellite applications	Journal web engineering	Volume No.-18, Issue No.-4, ISSN: 1540-9589	NOV,2019
21	Mr.Ch.Venkat eswarlu	Optimization for interference cancellation in MIMO-OFDM system using modified BAT algorithm	IJRTE	Volume No-8 Issue No.-4, ISSN: 2277-3878 (Scopus)	Nov 2019
22	Mr.G.S.Sivakumar	Proximity Beacons based Intelligent Transportation System for Smart City Applications	IJAST	Volume No-29 Issue No.-3, ISSN: 2277-3878 (Scopus) -	May 2020
23	Mrs.B. Vasantha Lakshmi	Skin Cancer Image Segmentation Based on Symmetrical Threshold Contour Algorithm	IJRTE	Volume-9 Issue-1	May 2020
24	Mrs.G.V.Ujwala	Wallace Tree Multiplier with Koggestone Adder using 15-4 Compressor	IJAREEIE	-	May 2020
25	Mr.Ch.Lakshmi Narayana	Design and Development of a System to Detect Third-party Damages of an Oil Pipeline using IoT	IJAST	ISSN: 2277-3878	May 2020

CONFERENCES

S.NO	Name of the faculty	Title of the Paper	Month & Year	Name of the
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				Journal
1	Dr.Subodh Panda	Smart Modernistic in Electronics and Communication	29 th & 30 th June, 2020	ICSMEC-2020
2	Mrs.B. Vasantha Lakshmi	A Qualitative Approach on De-Noising A Segmentation Algorithms for Skin Cancer Images	-	ICSTCEE 2020
3	Mr.Ch.Lakshmi Narayana	Analysis of IoT sensors for Monitoring the Oil Pipeline Parameters	June 2020	ICICS 2020
4	Dr.Subodh Panda	A fuzzy system implementation on sustainable heat recovery	15/5/20	NCCEET
5	Dr.A.Srinivas	A fuzzy system implementation on sustainable heat recovery	15/5/20	NCCEET
6	Dr.V.Sailaja	Wiener Filtering in frequency domain to enhance speech corrupted by colored noise	26th-27th July 2019.	ICSET
7	Dr.D.Nagesh	Design and performance analysis of multilayer for RF circuits	5-7 NOV2019	IEEE Asia pacific conference on wireless and mobile
8	Dr.D.Nagesh	Fuzzy system approaching on designing intelligent process-Modeling for thermal power plant	12-14 DEC 2019	PECCON
9.	Dr.D.Nagesh	Evaluation and testing of dual band reconfigurable monopole antenna for cognitive radio applications	11-12 OCT 2019	ICWC
10	Mrs.P.Sunitha	Wiener Filtering in frequency domain to enhance speech corrupted by colored noise	26th-27th July 2019.	ICSET
11	Mr.V.Prasanth	Wiener Filtering in frequency domain to enhance speech corrupted by colored noise	26th-27th July 2019.	ICSET

12	Mrs.B.Vasanthalakshmi	Wiener Filtering in frequency domain to enhance speech corrupted by colored noise	26th-27th July 2019.	ICSET
13	Mrs.B.Vasanthalakshmi	Analysis of Skin cancer images using wavelet de-noising	13 th -14 th dec 2019	NCACT
14	Mr.D.Natraj	Compact Rhombus Ring Dual Frequency micro strip antenna for wireless applications	Dec 2019	NCACT
15	Mr.D.Natraj	UWR MIMO with notch characteristics	Dec 2019	NCACT
16	Mrs.P.Prasanna kumari	Automated Severity Analysis of TB using Center Based Genetic Neural Network	27-29 NOV 2019	ICSSIT

SPONSORED RESEARCH

Funded research: Applied

S.No	Title of Project	PI & CO-PI Details	Scheme	Funding Agency	Budget	Submission Date	Status
1	Organization Of Science Exhibition To Create Awareness On Science And Technology Among Students Teachers And People Of East Godavari District	Dr.D.Nagesh Mr V.Prasanth Department of ECE	STEMM India	DST	14,70,000	30-8-2019	Received Primary Acceptance
2	Real Time Embedded System, IOT and its applications	Dr.V.Sailaja Professor Department of ECE	STTP	AICTE	2,40,000/-	30-01-2019	submitted
3	Bio-medical signal processing Lab	Dr Sanjit Kumar Dash Professor Department of ECE	MODROBS	AICTE	18,00,000/-	30-12-2019	submitted
4	Designing of Intelligent System controller for improvement over Environmental Pollutants of thermal power plant	Dr.V.Sailaja Professor Department of ECE	Research Promoter scheme (RPS)	AICTE	24,50,000/-	02-01-2020	submitted

5	Building Awareness At School Level And ITI, Polytechnic, Advanced Training Institute	Mr.V.Prasanth Assoc. Prof ECE	Special call for SC &SI	MST	11,70,000/-	30-11-19	submitted
6	Conduction Of National Level Conference/Workshops/Seminars Five Days Duration(CPS In Next Generation Transportation Systems)	Mr.K.P.Rao Asst Prof ECE	Special call for SC &SI	MST	10,01000/-	30-11-19	submitted
7	Conduction of national level conferences/workshop seminar three days duration on Artificial Intelligence	Mr.D.Natraj Assoc. Prof ECE	Special call for SC & ST	MST	11,65,000/-	30-11-2019	submitted
8	Conduction of national level conferences/workshop seminar three days duration on Artificial Intelligence (Cyber security and Block chain technology)	Mr.Balla Sudhir Asst Prof ECE	Special call for SC & ST	MST	11,65,000/-	30-11-2019	submitted
9	Advanced Microwave/RF Laboratory	Dr D Nagesh/Dr V Sailaja	MODRO B FOR ASPIRING INSTITUTIONS"	AICTE	Rs 19,20,000/-	27-08-2019	Under Processing
10	Enhanced electronic gadget for needy and alone women to provide safety and security using innovative processing techniques.	Dr D Nagesh Dr V Sailaja	SEED	DST	Rs 34,24,000/-	14-08-2019	Under Processing

DEVELOPMENT ACTIVITIES

Product development

- Students appeared to Various Product Development Skill Activities (SOCH) during the academic year 2019-20.

S.No	Title of product	Guidance given by the faculty Guided	Outcome of the project
1	Drinking water	Mr.P.Anuradha	Waste water can be converted into useful water
2	A Step Towards Traffic Collision	Mr.K.Raghuram	To avoid the traffic collision