

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES (Autonomous) :: RAJAMPET

AN EXCLUSIVE NEWS LETTER OF DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
FROM ANTRIX-ECE ASSOCIATION

Reach us at www.aitrajampet.ac.in/ecedept/index.htm

CONTENTS

Mission and Vision

PEO's and PO's

Events Organized

Student Activities

Faculty Publications

Antrix Newsletter is an amalgamation of all the events held in the Department of Electronics & Communication Engineering, Annamacharya Institute of Technology & Sciences, Rajampet. This e-News letter is compiled by Antrix-ECE Association with the inputs of the Faculty and Students of the Department. It plays an instrumental role in providing a greater exposure of the achievements accomplished.



VISION

To offer educational experiences those make the students globally competent, socially responsible and bring in answers to ever-ebbing problems in the field of Electronics & Communication Engineering.

MISSION

To offer high quality premier education in the field of Electronics & Communication Engineering and to prepare students for professional career and higher studies. To promote excellence in technical research, collaborative activities and positive contributions to society

Program Educational Objectives (PEOs)

- 1) Work efficiently as Electronics & Communication Engineers, including supportive and leadership roles on Multidisciplinary teams.
- 2) Communicate effectively, recognize and incorporate societal needs and constraints in their professional endeavors with high regard to legal and ethical responsibilities.
- 3) Develop attitude in lifelong learning, applying and adapting new ideas and technologies as their field evolves.

PROGRAM OUTCOMES

Students in the Electronic and Communication Engineering program should, at the time of their graduation, are in possession of:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

EVENTS ORGANISED

- One week Online FDP on “**ADVANCEMENTS IN NANO AND IMAGING TECHNOLOGIES**” was conducted on 3rd to 8th August- 2020 by the Dept. of ECE. The resource persons are Dr. C. Santosh Associate Professor, KLU he explained about development of technology towards nano and their applications. On day-2 the resource person was Dr. Vaibhav Meshram, Professor & Head of ECE, Dayanand Sagar University he explained about Nano technology insight. On day-3 the resource person was Mr. Ranjith C.V, Electrical Architect designer Philips India Ltd, Pune he explained about medical image processing. On day-4 the resource person was Dr. V. Siva Sankar Associate Professor, SITAMS, Chittoor he explained about medical signal processing. On day-5 the resource person was MS. Pragati Dwivedi, Assistant Professor, Shree L.R Tiwari college of Engineering , Maharashtra she explained about image steganography. On day-6 they taken hands-on training program.

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES (AUTONOMOUS) THALLAPAKA PANCHAYAT, NEW BOYANAPALLI-516126 RAJAMPET, KADAPA DIST. ANDHRA PRADESH <small>(An AICTE Approved, JNTUA Ananthapuramu, A.P., affiliated & NAAC 'A' accredited Institution)</small>		Resource Persons
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Presents ONE WEEK ONLINE FDP ON "ADVANCEMENTS IN NANO AND IMAGING TECHNOLOGIES" (ANIT-2020) From 03.08.2020 to 08.08.2020	03/08/2020 (Monday)	Nano Technology insight Dr. C.Santhosh Associate Professor KL University, Vijayawada
url for Registration : https://tinyurl.com/ANIT20 e-Certificates for all registered participants, No Registration Fee, Limited participants , selected on FCFS basis	04/08/2020 (Tuesday)	Development of Technology towards Nano and their Applications Dr.Vaibhav Meshram Professor and Head Dept of ECE Dayanand Sagar University, Bangalore
Chief Patrons: Sri. C.Gangi Reddy, Hon' Secretary, AET Sri.C.Yella Reddy, Vice Chairman, AET Sri.C.Abhishek Reddy, Executive Director, AET	05/08/2020 (Wednesday)	Medical Image Processing Mr. Ranjith, C.V Electrical Architect-Product Designer Philips India LTD - Pune.
Patron: Dr.S.M.V.Narayana, Principal, AITS, Rajampet	06/08/2020 (Thursday)	Medical Signal Processing Dr.V.Sivasankaran Associate Professor SITAMS, Chittoor, Andhra Pradesh.
Convenor: Dr. CH. Nagaraju, Professor & HOD-ECE	07/08/2020 (Friday)	Image Steganography Ms. Pragati Dwivedi Assistant Professor Shree L.R. Tiwari College of Engineering, Maharashtra
Co-Convenor: Dr.B.Abdul Raheem, Coordinator- Professional Bodies	Coordinators (s) : Dr. T. Karthikeyan & Dr. K. Shankar Organizing Secretary : Dr. Fahimuddin Shaik Organizing Committee : All the faculty members of ECE Department, AITS, Rajampet	
In Technical Collaboration with IEEE Student Branch, AITS, Rajampet	Visit us : www.aitsrajampet.ac.in	

ANTRIX-Association Events:

- A Guest lecture on “**DIGITAL COMMUNICATION AND ITS APPLICATIONS**” was conducted on 26th November 2020 by the dept. of ECE and in association with ANTRIX . In this guest lecture III B. Tech ECE students are participated. The resource person is Rama kalayan Professor, NIT Tiruchapalli.

FACULTY PUBLICATIONS

Journals:

- Ghazanfar Latif, Saravanakumar, N, Bhuvaneshwari, P, **SHANKAR K** and Muhammad O. Butt., (2020), “Scheduling and Resources allocation in network traffic using multiobjective, multiuser joint traffic engineering” Wireless Networks (Springer), Volume:26, Issue:08, July 2020, Page No.:5951–5963, ISSN: 1572-8196, (<https://doi.org/10.1007/s11276-020-02407-y>) (**SCI, SCOPUS**)
- **Shaik Karimullah, Syed Javeed Basha, V.Soma Sundar , U.Siva Priya** “Application of Hybrid Genetic Algorithm in VLSI Physical Design Automation for Placement of Different Blocks”, Turkish Journal of Computer and Mathematics Education, Volume: 11, Issue:2, August 2020, Page No.:687-694, ISSN: 1309-4653 (**SCOPUS**)
- **J. Chinna Babu, N. Nikhil Chandra Reddy, M. Malleswari, M. Manoj, G. Naga Jyothi, B. Maneesha** “An Intelligent Smart Black Box System For Crash Recovery”, International Journal of Advanced Science and Technology, Volume: 29, Issue:3, August 2020, Page No.:37-42, ISSN: 2207-6360 <http://sersc.org/journals/index.php/IJAST/article/view/5540/3441> (**SCOPUS**)
- **Fahimuddin Shaik, B. Vishwaja Reddy, G. Venkata Pavan kumar, C. Viswanath** “UnSupervised Segmentation of Image Using Novel Curve Evolution Method”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:587-597, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_57 (**SCOPUS**)
- **G.Thirumalaiah, S.Immanuel Alex Pandian, D.Teja Sri, M.Karthik Chowdary, A.Kumarteja,** “An Optimized Clustered Based Video Synopsis by Using Artificial Intelligence”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:563-575, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_55 (**SCOPUS**)
- **M.Venkata Dasu, P.Tabassum khan, M.Venkata Swathi, P.Venkata Krishna Reddy,** “Robust Algorithm for Segmentation of Left Ventricle in Cardiac MRI”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:555-562, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_54 (**SCOPUS**)
- **P.Siva Kalyani, G.Sasikala** “Morphological Watershed Approach for the Analysis of Diabetic Nephropathy”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:547-554, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_53 (**SCOPUS**)

- **Fahimuddin Shaik**, P.Pavithra, K.Swarupa Rani, P.Sanjeevulu “Image Segmentation with Complex Artifacts and Correction of Bias”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:519-526, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_50 (SCOPUS)
- **J.Chinna Babu**, A.Thriloknatha Reddy “A Review on OTA with Low Power and Low Noise Techniques for Medical Applications”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:493-506, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_48 (SCOPUS)
- **J.Chinna Babu**, N.Mallikharjuna Rao “Throughput Comparison of Majority Logic Decoder/Detector with other Decoders Used in Communication Systems”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:475-491, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_47 (SCOPUS)
- **Fahimuddin Shaik**, J.Chettemma, S.Mohammed Islam, B.Lakshminath Reddy, S.Damodhar Reddy “Enhancement of Cerebral and Retinal Vascular Structures Using Hessain Based Filters”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:461-471, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_46 (SCOPUS)
- **S.Fayaz Begum, B.Prasanthi** “Investigation of Level Set Segmentation Procedures in Brain MR Images”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:431-438, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_43 (SCOPUS)
- **P.Siva Kalyani, S.Nazeer Hussain**, N.Vishni Teja, S.Younus Hussain, B.Amarnatha Reddy “Speckle Based Anisotropic Diffusion Filter for Ultrasound Images”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:421-429, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_42 (SCOPUS)
- **G.Obulesu, Fahimuddin Shaik**, C.Sree Lakshmi, V.Vijay Vardhan Kumar Reddy, M.Nishanth, L.Siva Shankar Reddy “Optic Disk Segmentation for Glaucoma Detection in Retinal Images”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:411-420, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_41 (SCOPUS)
- N.Jaya Krishna, **Fahimuddin Shaik**, G.C.V.Harish Kumar, D.Naveen Kumar Reddy, M.Bala Obulesu “Retinal Vessel Tracking Using Gaussain and Radon Methods”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:375-384, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_37 (SCOPUS)

- **Shaik Karimullah, Syed Javeed Basha**, P. Guruvyshnavi, K. Sathish Kumar Reddy, B. Navyatha, “A Genetic Algorithm with Fixed Open Approach for Placements and Routings”, LECTURE NOTES IN ELECTRICAL ENGINEERING- SPRINGER, Volume: 698, October 2020, Page No.:599-610, ISBN: 978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_58 (SCOPUS)
- **Shaik Karimullah**, D.Vishnuvardhan, **K. Riyazuddin**, K. Prathyusha, K. Sonia, “Low Power Enhanced Leach Protocol to Extend WSN Lifespan”, LECTURE NOTES IN ELECTRICAL ENGINEERING- SPRINGER, Volume: 698, October 2020, Page No.: 527-535, ISBN: 978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_51 (SCOPUS)
- **Hima Bindu, V. Sai Anusha** (2020) “Colour Image Segmentation using Super-Pixel based Fast FCM”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:385-392, ISBN:978-981-15-7961-5, https://doi.org/10.1007/978-981-15-7961-5_38 (SCOPUS)
- **Dr.Ch.Nagaraju**, Veera Prasad Reddy P., Suneel N., Kumar G.N. (2021) “Performance Analysis of LTE Based Transceiver Design Using Different Modulation Schemes”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:577-585, ISBN:978-981-15-7961-5, doi.org/10.1007/978-981-15-7961-5_56 (SCOPUS)
- **Dr.Ch.Nagaraju, Thirumalaiah G.**, Rajesh N., Bala Manikanta B., Sai Sivaram N., Prakash Raj T, “Automated Speed Braking System Depending on Vehicle Over Speed Using Digital Controller”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:537-545, ISBN:978-981-15-7961-5, doi.org/10.1007/978-981-15-7961-5_52 (SCOPUS)
- **Dr.Ch.Nagaraju**, G. Chandana, B. Manoj Kumar, C. Kishore Kumar, “Development of Hybrid Pre-coding Technique for MIMO Systems Based on Kalman Filter”, Springer, Lecture Notes in Electrical Engineering, Volume: 698, October 2020, Page No.:451-460, ISBN:978-981-15-7961-5, doi.org/10.1007/978-981-15-7961-5_45 (SCOPUS)
- **K. Riyazuddin, S. Nazeer Hussain**, O. Homa Kesav, **S. Javeed Basha** “The LTE Indoor and Outdoor Performance Evaluation Using OFDM” LECTURE NOTES IN ELECTRICAL ENGINEERING-SPRINGER, Volume: 698, October 2020, Page No.: 507-517, ISBN:978-981-15-7961-5, [10.1007/978-981-15-7961-5_51](https://doi.org/10.1007/978-981-15-7961-5_51) (SCOPUS)
- **C.Venkatesh**, Polaiiah Bojja “Lung Cancer Detection using Bio-Inspired Algorithm in CT Scans and Secure Data Transmission through IoT Cloud”, International Journal of Advanced Computer Science and Applications,, Volume: 11, Issue: 11, November 2020, Page No.: 373-379, ISSN : 2156-5570 Doi:10.14569/IJACSA.2020.0111148 , (SCOPUS, WEB OF SCIENCE)

- Kethepalli Mallikarjuna, **Bepar Abdul Raheem**, Govindaraj Pathanadka, Sudha kar Mogappair Suriyakumar, “A Simple Shape Descriptor Merging Arithmetical Wrap Around Technique With Absolute Localized Pixel Differences” Wireless Personal Communication, Volume: 115, Issue: 4, November 2020, Page No.: 2770 , ISSN: 1572-834X, <https://doi.org/10.1007/s11277-020-07991-y> (**SCIE, SCOPUS**)

SDP/FDP/MDP/Workshops:

S. No	Name of Faculty	SDP/FDP/MDP/ Workshops	Organized Institution	Date(s)
1.	C.Venkatesh	Emerging Technologies in Robotics and Automation	KL University, Vijayawada	5 th to 9 th July 2020
2.	M.Venkata Dasu	Emerging Technologies in Robotics and Automation	KL University, Vijayawada	5 th to 9 th July 2020
3.	Y Pavan Kumar Reddy	Advances in Signal Processing and Artificial Intelligence Technologies	G.Pulla Reddy Engineering College (Autonomous), Kurnool	6 th to 10 th July 2020
4.	V Sai Anusha	Advances in Signal Processing and Artificial Intelligence Technologies	G.Pulla Reddy Engineering College (Autonomous), Kurnool	6 th to 10 th July 2020
5.	M Ravikishore	Engineering Optimization	NITTR, Chandigarh	13 th to 17 th July 2020
6.	M Ravikishore	MATLAB and Its Applications In Engineering Using Machine Learning & Deep Learning	G.Pulla Reddy Engineering College (Autonomous), Kurnool	13 th to 17 th July 2020
7.	M Ravikishore	Micro Controller and Analog and Digital Electronics	CMR Institute Of Technology, Bengaluru	20 th to 25 th July 2020
8.	M Ravikishore	Research Trends in Image Processing With Machine Learning and Deep Learning	G.Pulla Reddy Engineering College (Autonomous), Kurnool	20 th to 25 th July 2020
9.	C.Venkatesh	Research Trends in Image Processing With Machine Learning and Deep Learning	G.Pulla Reddy Engineering College (Autonomous), Kurnool	21 st to 25 th July 2020
10.	J.Chinna Babu	Advances in Next Generation Wireless Communications & Networks	G.Pulla Reddy Engineering College, Kurnool	27 th to 31 st July 2020
11.	C.Venkatesh	NAAC Accreditation For Affiliated Colleges 2020 - Roadmap And Guidelines	GCEM - Internal Quality Assurance Cell (IQAC), Bangalore	27 th to 31 st July 2020
12.	M Ravikishore	Image Processing Using MATLAB	NITTR, Chandigarh	27 th to 31 st July 2020

13.	C. Venkatesh	Msp430, MATLAB Tools & Its Applications	KSRM College Of Engineering, Kadapa In Association With Ekalavya Group Of Technologies, Kadapa	28 th to 30 th July 2020
14.	Basivi Prasanthi	Msp430, MATLAB Tools & Its Applications	KSRM College Of Engineering, Kadapa In Association With Ekalavya Group Of Technologies,	28 th to 30 th July 2020
15.	Basivi Prasanthi	Research Issues & Challenges In Electronics & Communication Engineering	Santhiram Engineering College, Nandyal	27 th July to 1 st August 2020
16.	C.Venkatesh	VLSI & Embedded Systems Design For Aerospace & Defence Applications	Sri Venkateswara Institute Of Science & Technology, Kadapa	10 th to 14 th August 2020
17.	Dr. K Riyazuddin	Recent Trends in Engineering	Universal Engineering College, Thrissur	24 th to 28 th August 2020
18.	S. Nazeer Hussain	Quantum Computing	Electronics & ICT Academy Supported by Ministry of Electronics & Information Technology, India	24 th to 29 th August 2020
19.	Dr. K Riyazuddin	Recent Advances in VLSI & Embedded Systems	KL University, Vijayawada	14 th to 19 th September 2020
20.	M. Ravikishore	Data Science & its Applications in STEM	Andhra University, University Engineering College, JNTUK in association with APSCHE	7 th to 21 st September 2020
21.	M. Ravikishore	Latest Technological Developments in ECE	KL University, Vijayawada	5 th to 17 th October 2020
22.	Basivi Prasanthi	Latest Technological Developments in ECE	KL University, Vijayawada	5 th to 17 th October 2020
23.	C. Venkatesh	Statistics For Artificial Intelligence & Machine Learning	G.Pullaiyah College Of Engineering And Technology & Ravindra College Of Engineering For Women, Kurnool	2 nd to 7 th November 2020

Patents:

S.N O	Name of Applicant(s)	Name of other Inventor(s)	Title of the Invention	Application No	Date of Filing	Publication Date
1.	----	J. ChinnaBabu	An efficient Arithmetic VLSI Architecture for DWTT Error Approximation	201941053591	23/12/2019	18/09/2020
2.	J. Chinna Babu	P. Syamala Devi M. Hanumanthu J. ChinnaBabu	Self-Realibility Based Weighted Soft-Bit- Flipping Algorithm for Decoding EG- LDPC Codes	201941054297	28/12/2019	09/10/2020
3.	Dr. K. Riyazuddin	Dr. K. Riyazuddin	Enhancement of quality of service in Wireless Sensor Network by Redundant Sensors Controlling	202041051968	28/11/2020	11/12/2020

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