



VIDYA JYOTHI
Institute of Technology

AN AUTONOMOUS INSTITUTION

SAMPADA

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Student Editors: K.Bharhavi, R.Lakshya



Sampada

FROM OUR DIRECTOR

Through this newsletter we shall observe tremendous growth in the interest among the Faculty and the students regarding various activities within the department. I would like to convey my appreciation to the members of team SAMPADA, whose collective help in coordinating the activities of the department is reflected in this newsletter.

Dr.E. Sai Baba Reddy, Director, VJIT



FROM OUR PRINCIPAL

I congratulate the students and faculty of ECE for their consistent efforts and achievements towards all the aspects that are effectively represented in SAMPADA, the face of ECE. I also express my appreciation to the editorial team for its fantastic work. I encourage the ECE department to continue its zeal of participation in all events/activities in the future to come.

- Dr. A. Padmaja, Principal, VJIT



MESSAGE FROM THE HOD



This news letter really is a special time for us as we reflect back on the highlights and focus on the success of our students and staff. With collective effort of faculty who are backbone of department students have actively participated in hackathons, workshops and many events which are have been reflected in our department newsletter 'SAMPADA'. We continue to be relentless in growing the capability of our students as learners and helping students to achieve personal excellence and serve mankind with innovative ideas. That will never change. We also look forward that our Alumni will do continue to serve perceived skills from department in various aspects in their future endeavors. Looking forward for support and suggestions for further accomplishments and procurements.

-Dr.K.Vasanth,Head of the Department

DEPARTMENT

VISION

From vacuum tubes to integrated circuits, a vast development in technology brought about drastic changes in our day to day life. This has not only increased comfort but has also enhanced the opportunities for the students in the department of ELECTRONICS AND COMMUNICATION. This plays a key role in expanding the students' knowledge on recent technologies that help them stay on par with the modern-day technology and meet the contemporary industrial demands. The students are encouraged to indulge themselves in various research activities supervised by the faculty of the department. All these factors culminate in an all-round development of the students who after passing out, are either placed in leading industries or pursue higher studies in various Universities, even abroad.

MISSION

- To enable students to develop into outstanding professionals with high ethical standards as well as capable of creating, developing and managing global engineering enterprises.
- To organize seminars and workshops to enrich the academic ambience of the Institute.
- To strength the communication skills along with the technical skills by interacting with activities other than academics like industrial visits ,workshops etc.

A GLANCE AT DEPARTMENT ACTIVITES:

The department of ELECTRONICS AND COMMUNICATION Engineering has taken several steps towards not just enhancing the students' knowledge but also that of the faculty's. This will in turn contribute in the carving of the future of the students through remarkable skills and innovations nurtured at our department. This is carried out through various activities, conducted in the department

EVENTS:

A six-day faculty development program on "Disruptive Technologies in Electronics and Communications" Engineering in association with IETE Student Chapter dated from 22-06-2020 to 27-06-2020. The six-day FOP contains twelve sessions.

First day:

Forenoon session, handled by Dr. K. Vasanth, Professor and HoD/ECE. Lecture on Leo Orbit Nano Satellites Design

Afternoon session, handled by Dr.P.Ganesan , Professor , ECE. Lecture on Computer Vision and its Applications.

Second day:

Forenoon session, handled by Dr.S.Saravanan, Assistant Professor/ECE. Lecture on Video Streaming and its Applications.

Afternoon session, handled by Dr. V. G. Sivakumar, Associate Professor/ECE. Lecture on Underwater Acoustic Signal Processing.

Third day :

Forenoon session, handled by Mr.S.Upendra, Assistant Professor/ECE. Lecture on Machine Learning and its Applications.

Afternoon session, handled by Dr.V.G.Sivakumar, Associate Professor/ECE. Lecture on Underwater Acoustic Signal Processing.

Fourth day:

Forenoon session, handled by Dr.Siddharth Ghosh, Professor & HOD/AI. Lecture on Data Science in Engineering.

Afternoon session, handled by Dr.M.Girish Kumar, Associate Professor/ECE. Lecture on Nano Interconnects.

Fifth day:

Forenoon session, handled by Dr.C.N.Ravi, Professor/ECE. Lecture on Nature Inspired Optimization.

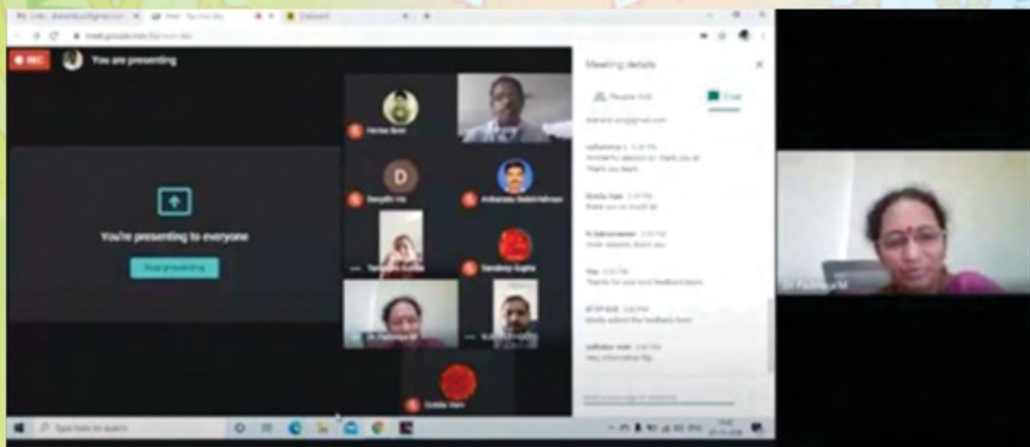
Afternoon session, handled by Dr.Phanindra Bogu, Professor/MECH. Lecture on 3D Printing and its Applications.

Sixth day:

Forenoon session, handled by Mr. Md Akram Ahmed, Assistant Professor /ECE. Lecture on Modern Antennas for Communications.

Afternoon session, handled by Dr. P. Ganesan, Professor/ECE. Lecture on Artificial Intelligence and its Applications.

- A one-week online short term training program (STTP) on " Recent Emerging Trends in Wireless Communication using IOT" in association with AICTE from 09-11-2020 to 16-11-2020. One week online STTP contains twelve sessions coordinated by Dr. M. Vadivel, Professor, Dept. of ECE.
- A one-week Online Short Term Training Program (STTP) on "SciLab: An Effective Open Source Tool for Computer Vision and Machine Learning" in association with AICTE from 02-11-2020 to 07-11-2020.



- A one-week Online Short Term Training Program (STTP) on "Recent Emerging Trends in Wireless Communication using IoT" in association with AICTE from 09-11-2020 to 06-11-2020. One-week online STTP contains twelve sessions coordinated by Dr. M. Vadivel, Professor, Dept. of ECE.
- A one-week Online Short Term Training Program (STTP) on "Recent Emerging Trends in Wireless Communication using IoT" in association with AICTE from 07-12-2020 to 12-12-2020. One-week online STTP contains twelve sessions coordinated by Dr. M. Vadivel, Professor, Dept. of ECE.

DEPARTMENT NEWS

CERTIFICATIONS

We have seen a tremendous increase in online certifications and our staff and students have been doing a wonderful job in achieving various certifications.



Mr.S.Pradeep Kumar Reddy, Asst. Professor.ECE



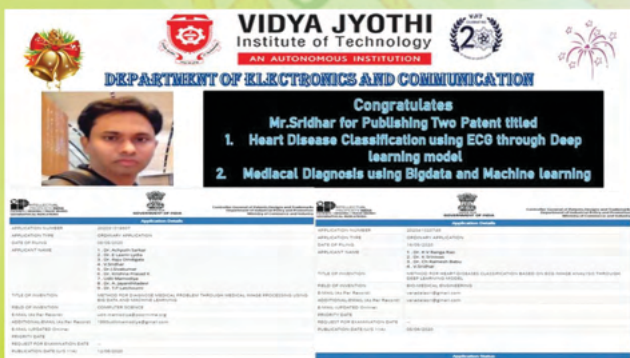
Mr.V.Sridhar, Asst. Professor.ECE

The following year around 25 major certifications were completed from coursera by our students and faculty producing great results.

Publications by the Department

- 1)Dr.K.Vasanth and Mr. Pradeep Manikrao Patil of ECE Department have presented a journal on Safe and optimized iris recognition system using deep learning and gabor transform based approach in Journal of Green Engineering, by alpha publishers 10&10/ 8627-8642/ Oct 2020 2245-4586 Scopus.
- 2) K. Deepika, M. Mounika, S. Mani Chandana, J. Rakshit, Kavita.boddupally, Sadhu. Satya Sravani of ECE Department have presented a journal on Child Rescue System from Borewell at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2182-2189 / Nov 2020 2515-8260 Scopus.
- 3)Mr.Shaik Maznu, G.Deekshitha, G.Bhavana, P.Yeshwanth, K.Rajesh of ECE Department have presented a journal on VEHICLE TRACKING (ANGLE) SYSTEM USING IOT TECHNOLOGY at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2175-2181 / Nov 2020 2515-8260 Scopus
- 4)Mrs.CH.S.N Sirisha Devi, V. Saipriya, P. Sushma , Y. Karthik, PV.sai sumanth of ECE Department have presented a journal on FOOD STORAGE MONITORING AND SERVING PEOPLE USING IOT at the European Journal of Molecular & Clinical Medicine (EJMCM) ,7&11/ 2245-2253 / Nov 2020 2515-8260 Scopus
- 5)Mrs.K.Pavani, Taragani, K.Lahari, R.Nikhila, K.Vilehkya, K.Saiteja of ECE Department have presented a journal on Automatic Railway Gate Control System Using IR sensors at the European Journal of Molecular & Clinical Medicine (EJMCM)7&11/ 2229-2234 / Nov 20202515-8260 Scopus
- 6)Sridevi.Jalakam, B.Sathweek, P.Shashank, M.Pavan , P.Niharika Machine Learning Based Water Quality Checker and pH Verifying Model European Journal of Molecular & Clinical Medicine (EJMCM) European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2220-2228 / Nov 2020 2515-8260 Scopus
- 7)Sahithi K, Ravalika B, Triveni A, Rishitha K, Dr.Vasanth K, Marish Kumar P, Srinivasan K S A of ECE Department have presented a journal on Decision Based Unsymmetrical Trimmed Modified Winsorized Geometric Mean for the Removal of High Density Salt and Pepper Noise in Images at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2256-2263 /Nov 20202515-8260 Scopus
- 8)Thota Arun, Divyavani K, Boini Varun, Peter Moshe, K.Vasanth, P.Marish Kumar, Srinivasan K S of ECE Department have presented a journal on Garbage Collection Robot and Monitoring System Using Wireless Communication European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2235-2244 /Nov 2020 2515-8260 Scopus.
- 9)Rajini Karanam, Dr.Vasanth.K of ECE Department have presented a journal on High Speed Parallel VLSI Architecture for 9 elements sorting in Image De-noising applications European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2209-2219 /Nov 20202515-8260 Scopus
- 10)Santapuram Saikiran , Mr.G. Sreenivasa Rao, Dr. Mekala Girish Kumar of ECE Department have presented a journal onTHERMAL ANALYSIS OF THROUGH SILICON VIAS USING MWCNT BASED TSV IN 3D INTEGRATED PACKAGING SYSTEM at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2203-2208 /Nov 2020 2515-8260 Scopus

- 11)V.Sridhar, Dr.K.V.Ranga Rao, Sreenath Elisetty, Mirza Sajid Ali Baig, Shaheena Kamrani, Ramgiri Vishal of ECE Department have presented a journal on OPTIMIZATION IN 5G NETWORKS FOR DEVICE TO DEVICE COMMUNICATIONS at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2194-2202 /Nov 2020 2515-8260 Scopus.
- 12)Mr S.Pradeep Kumar Reddy ,P.Narseen , Ms Anvitha Erlinda, J.Sudha Devi of ECE Department have presented a journal on Futuristic Design of Breath to Voice Conversion Technology for Dumb People at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&11/ 2190-2193 / Nov 2020 2515-8260 Scopus.
- 13)S.santhi priya, Mohammad Asif, Mohammad Sharooq, L.Rohith, S.Sanju of ECE Department have presented a journal on Multiresolution Palm Image Fusion Approach for Image Enhancement at the European Journal of Molecular & Clinical Medicine (EJMCM)7&4/ 2432-2437 / Jul 2020 2515-8260 Scopus
- 14)Manne Renuka, G. Mary Valantina, Mamatha.N,Vishnu.K, Rakesh.T, Rahman.Md of ECE Department have presented a journal on AUTOMATIC LPG IN CYLINDER MONITORING & BOOKING OVER ANDROID at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&4/ 2418-2424 /Jul 2020 2515-8260 Scopus
- 15)Sateesh Amarneni, Mallesh Sudhamalla, Dr.K.Bharat Kumar, Dharma Teja Sabbani,Uma Bodaof ECE Department have presented a journal on Implementation of a 32-bit MIPS based on the RISC processor by using VHDL at the European Journal of Molecular & Clinical Medicine (EJMCM) 7&4/ 2376-2382 /Jul 2020 2515-8260 Scopus
- 16)A.Jaya Lakshmi, Omprakash Siripolu, Divya Mudireddy, Anand Surya, Pavan Kumar Pathepur of ECE Department have presented a journal on Hand Gesture Controlled Robot European Journal of Molecular & Clinical Medicine (EJMCM) 7&4/ 2371-2375 / Jul 2020 2515-8260 Scopus.
- 17)G.Ravi Kishore, KummariAkhila, Meer Syed Mustaq Hussain , KatneGanesh, Gudupalli Saiprasad of ECE Department have presented a journal on An effective approach to charge IOT devices using footsteps European Journal of Molecular & Clinical Medicine (EJMCM)) 7&4/ 2234-2330 / Jul 2020 2515-8260 Scopus.
- 18)Lingala Anitha, CH. Sandeep Implementation Of Xor Based Multiplier Using Mux of ECE Department have presented a journal on European Journal of Molecular & Clinical Medicine (EJMCM) 7&4/ 2514-2522 / Jul 2020 2515-8260 Scopus.
- 19)Protection for Exam Paper Leakage Using Arduino E. Supraja, S. Saravanan, D. Pranitha, D. Supriya, M.Rahul yadav, V. Shravan reddy of ECE Department have presented a journal on European Journal of Molecular & Clinical Medicine (EJMCM)7&4/ 2499-2502 / Jul 2020 2515-8260 Scopus.
- 20)M.Sai Keerthana, Upendar Sapatiof ECE Department have presented a journal on Filter using fast binary counters based on symmetric stacking at the European Journal of Molecular & Clinical Medicine (EJMCM) 7 & 4 / 2272-2278 / Jul 2020 2515-8260 Scopus.



Mr.V.Sridhar from our department has published two patents:
 1)HEART DISEASE CLASSIFICATION USING ECG
 2)MEDICAL DIAGNOSIS USING BIGDATA AND MACHINE LEARNING

Mr. V.Sridhar from our department has published the book chapter "DEEP LEARNING TECHNIQUES FOR SIGNAL AND IMAGE PROCESSING" as one of the series editor.

Call for Book Chapters (Will be indexed in Scopus and Web of Science)

CRC Press
Taylor & Francis Group

Book Chapter Title: **Deep Learning Techniques for Signal and Image Processing**
Series Editors: Dr.N.M.Nanditha, Dr.S.EmadilBasha, Dr.BakulChakravarti, Subhasini Institute of Science and Technology, Mr. V.Sridhar, Vidya Jyothi Institute of Technology, Dr. Sheng-Leng Peng, National TsingHua University

AIM AND SCOPE OF THIS BOOK

- To focus on the solutions developed for complex engineering problem and Real World Problems using the three types of deep learning networks
- To formalize the problem definition for one's own specific application, to specify the objectives, to choose the desired network and to analyze the performance of the chosen network.
- To enable the reader to develop one's own deep learning neural network for specific applications.
- To evaluate the MATLAB programs and the feasibility of these networks can be studied for one's own set of input signals and images.
- To cover a wide range of applications from signal processing to signal classification and from image preprocessing to image restoration, image classification to image fusion through image segmentation.
- To widen the application of deep learning techniques towards developing encryption and decryption techniques.

Chapter No.	Table Of Contents / Recommended Topics
1	Deep Learning Techniques For Signal Processing
2	Image Preprocessing Using CNN
3	Signal Analysis using Deep Learning Techniques
4	Image Processing using Convolutional Neural Networks
5	Deep Learning Techniques for Image Restoration
6	Deep Learning Techniques for Information Coding
7	Designing domain specific deep learning neural networks

IMPORTANT DATES:
 Abstract submission: 30.8.2021
 Abstract Acceptance: 14.9.2021
 Camera ready paper submission: 7.9.2021

AIM AND SCOPE OF THIS BOOK
 Edited by: Dr. N.M.Nanditha, Dr. S.EmadilBasha, Dr. BakulChakravarti, Subhasini Institute of Science and Technology, Mr. V.Sridhar, Vidya Jyothi Institute of Technology, Dr. Sheng-Leng Peng, National TsingHua University

STUDENTS CORNER

Despite the pandemic, students have participated in numerous activities to enhance their knowledge and help them in the future to come, some of them were organized by the department and few by other Colleges and Institutes:

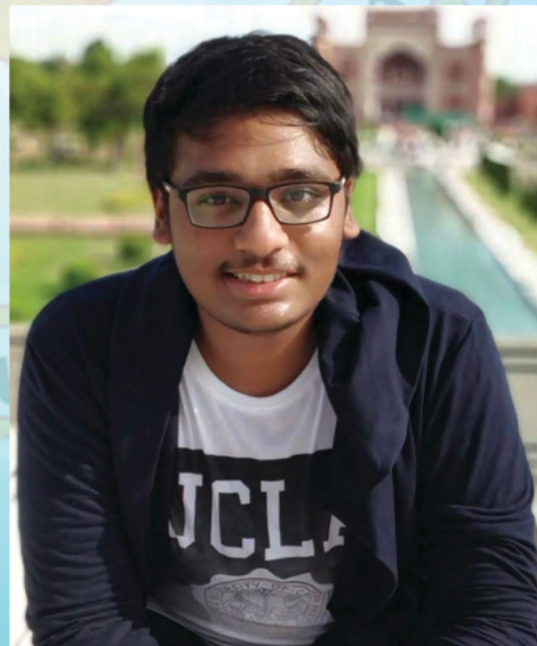
- 85 Certificates were acquired by the students of ECE at various guest Lectures/Seminars/webinars/FDPs.
- Webinars on all that count in night altitude at head of cooperate communication, L&T METRO RAIL (HYO) by ECE, VJIT.
- Project expo at JNTU was represented by 4th year students of VJIT ECE received 2nd prize.
- 25 students presented a paper on their ideas in ESHWARI ENGINEERING COLLEGE of 4th years of ECE, VJIT.
- The students of ECE 4th yr won, 2nd, consolation prize at Fempreneur 2021-A Business idea.
- 2nd prize at youthest virtual engineering project contest.
- Students of ECE got selected for Special recognition for research excellence in UG(Nation) category.
- National level participation certificate was received by 13 students from Codathon and various quizzes.
- A technical Webinar on designing ternary logic gates by VJIT for 3rd and 4th year students of ECE.
- 135 number of participants from ECE have attended various Webinars.
- P.V.Sai Krithik, student of 3rd year, ECE completed and acquired 25 certificates from Coursera.

ఇతరులకు ఉపాధి కల్పించే స్టాయికి ఎదగాలి



విద్యార్థినులకు జూపిక అందజేస్తున్న మంత్రి గంగుల కమలాకర్

ఈనాడు, హైదరాబాద్, మాదాపూర్, న్యూస్టుడే: నలుగురికి ఉద్యోగాలు కల్పించే స్టాయికి ఎదగాలనే లక్ష్యంతో యువత ముందుకు సాగాలని మంత్రి గంగుల కమలాకర్ అన్నారు. మాదాపూర్లోని హైటెక్స్లో బిజినెస్ ఉమెన్ ఎక్స్పోలో ఆదివారం సాయంత్రం ఫెమ్ ప్రెస్మార్-2021 వేదిక కళాశాల విద్యార్థినులకు వ్యాపార ఆలోచనల పోటీలు నిర్వహించారు. ధాన్యం పంచే కియోస్కు(డిపీకే)కు రూపకల్పన చేసిన ఇంజనీరింగ్ ఆఖరి సంవత్సరం విద్యార్థినులు సీహెచ్ సాయిఅలేఖ్య, కరిష్మ, జి.కిరణ్ణయి, డి.మౌనిక నగదు పురస్కారం, అదే కళాశాల విద్యార్థినులు కామేశ్వరి, దివ్యలు కోకో కసాయి ప్రాజెక్టుకు రెండో బహుమతి గెలుచుకున్నారు. రాష్ట్ర పరిశ్రమల శాఖ ముఖ్యకార్యదర్శి జయేష్ రంజన్, సీడడబ్ల్యూఈ జాతీయ అధ్యక్షురాలు పి.సౌదామిని పాల్గొన్నారు.



P.V.Sai Krithik

STUDENT PUBLICATIONS:

3 Students of our department K.Sai Chaitanya Reddy, M.Neeraj and R.Soumya have presented a paper title "Impact of Distance Measures in Shepards Interpolation Algorithm Natural Images Corruption by Outliers" at the 3rd International Conference on Intelligent Communication Technologies and Virtual Networks (ICTCV2021).



INTERNSHIP OPPORTUNITIES:

- 27 students from ECE have been selected as Interns at the NATIONAL INSTITUTE OF SOLAR ENERGY (domain:SOLAR PANELS) from the first week of April.
- 11 number of students from ECE have been selected as Interns at MECTRONIX (domain: MAGNETIC DEVICES) from the first week of April.
- G KAIVALYA REDDY and KURVA SAKSHI have been selected as Interns for THE CLIMBER (domain: IT).
- CHITTURI SAI ALEKHYA and GARREPALLY TEJASWI have been selected as Interns for VIRTUSA (domain: IT).
- ARAVA VENKATA SURYA PRAKASH and DEEKONDA MANIVARDHAN got selected as Interns at CAPGEMINI (domain IT).
- CHILUKA HARIKA, KAYALA ROHITH SHANKAR, MADISHETTY ANILA has been selected as Interns for sapient (domain:OPTICAL DEVICES) from the first week of April, with a stipend of 5000.
- DYAPA BHAVYA REDDY, PRANUSHA PRIYA MUNAGANTI and MUTHADI DIVYA got selected as Interns TECHOLUTION from the first week of April. domain IOT with a stipend of 8000.
- KASAB SHRAVAN KUMAR and DONTULA VISHAL have been selected as Interns at DHRUV.

STUDENTS CORNER

TERTIARY EDUCATION ACHIEVEMENTS :

- 21 students from ECE have cracked competitive exams of engineering. Namely, GATE ,GRE ,TO EFL ,PGECET.
- 14 students have secured admission for M.TECH and M.S into various Universities.

RECRUITMENTS AT GLANCE:

The students of our Department have always proved their excellence, by getting placed in various MNC's through their knowledge in most recent technologies.

VIRTUSA-5 (4 LPA)
CAPGEMINI -9 (3.8 LPA)
TCSNINJA-1 (4 LPA)
MULTIPLEX SOLUTIONS-5 (3 LPA) .
TCS DIGITAL-1 (6 LPA)
THE CLIMBER- 5 (4 LPA)
MEDIA MINT-3 (3.1 LPA)
CHEGG INDIA-4 (3.4 LPA)
PROLIFICS INDIA-1 (3 LPA)
GEMINI-3 (2.4 LPA)
ZENER-2 (2.8 LPA)
DHRUV SOFT-2 (2.5 LPA)



Yothi
Institute
of Technology