News Letter

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A VOICE OF ELECTRONICS AND COMMUNICATION ENGINEERING

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NCKITS-2018

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KKR & KSR INSTITUTE OF TECHNOLOGY & SCIENCES
10 YEARS OF SHAPING FUTURE
NIRNAYAKA UTSAV
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NBA has approved the Accreditation for Electronics and Communication engineering for three academic years

The institute is a symbol of egalitarian outlook without discretions. KITS student activity council is organized exclusively by students with representatives from various disciplines stands for the advocacy of democracy and leadership opportunities provided by the institute. KITS student clubs enable all the students and staff mingle freely to express their views and share their talents and expertise. **KITS imparts Outcome Based Education (OBE)** which gives equal opportunities to teaching and learning curricular, co-curricular and extra-curricular activities.

NBA peer team visited the college and the department for the verification on 16th , 17th and 18th of February 2018. They observed very keenly and aptly each and every lab in the ECE department. They have interacted with the students and faculty very well, by asking them various questions. They full fledgedly got satisfied with the verification of labs. They have given some valuable suggestions in order to improvise the department.

"Based on the expert team evaluation during 16th to 18th February 2018 the Competent Authority in NBA has approved the Accreditation for Electronics and Communication Engineering for three academic years (up to 30th June 2021)"

The higher authorities of college are very happy for the Accreditation and thanked the faculty, students who supported.

Vision

Developing highly Qualitative, Technically Competent and Socially Responsible Engineers.

Mission

To provide quality education in the domain of Electronics and Communication Engineering through

- Enriched curriculum for addressing the needs of Industry.
- Effective teaching learning processes through congenial environment.
- Gaining contemporary knowledge through research, development, curricular, co and extra-curricular.

ECE Program Educational Objectives

Graduates of Electronics & Communication Engineering Shall

PEO1: Develop a strong background in basic science and mathematics and ability to use these tools in their chosen fields of specialization.

PEO2: Have the ability to demonstrate technical competence in the fields of electronics and communication engineering and develop solutions to the problems.

PEO3: Attain professional competence through life-long learning such as advanced degrees, professional registration, and other professional activities.

PEO4: Function effectively in a multi-disciplinary environment and individually, within a global, societal, and environmental context.

PEO5: Take individual responsibility and to work as a part of a team towards the fulfillment of both individual and organizational goals.

#Press for Progress

International Women's Day (March 8) is a global day celebrating the social, economic, cultural and political achievements of women. International Women's Day is celebrated to felicitate women and their achievements. Women have come a long way in their struggle for equality, but there is still a long distance to cover. This year, the theme for Women's Day is **#Press for Progress.'**

Preparation of Women's Day Programme had started immediately after identifying the need for Women's motivation towards their duties. The approval for the Women's Day Programme was sought almost two weeks in advance. The circular was circulated among all lady faculty members and girls for their information. The Seminar was arranged well in advance.

International Women's Day is celebrated in the KITS College by the students and staff with great zeal and passion to increase the awareness about women's rights. This event celebration plays a great role in distributing the real message about the women's right and their place in the society. It promotes the living condition of the women by solving their social issues.

women must empower together to move or steps arround the world and to fly flag of women empowerment in the world. How come women is like a common balnce as she balance the family inside and socity another side

It was a plat form to enable and encourage social, political and economic empowerment of women in all strata of the society. The objectives of womens day was to generate new ideas, concepts, theories and ideologies for women empowerment. "women are not born but made". This sentence itself shows the power of women in a family or socity. The women must stepout from home to democracy.

NIRNAYAKA UTSAV

KITS celebrated its 10h Annual Day with the name "NIRNAYAKA UTSAV" on Saturday,on 17th March 2018 amidst great zest, vibrancy and elation. Honorable Malakondaiah Garu ,DGP, Andra Pradesh was the esteemed Chief Guest.

Among other dignitaries present were Sri K. Subba Rao, Chairman ,KITS , Sri.K.Sekar, Secretary , KITS and Dr. P.Babu ,Principal KITS .The program commenced with the lighting of the Ceremonial lamp by the Hon'ble Chief Guest, escorted by the other dignitaries and the Principal. This entailed the bouquet presentation and pinning of badges. Next, the Principal, Dr. P.Babu formally welcomed the eminent guests and introduced the Hon'ble Chief Guest to the gathering and read the KITS College Annual report of the past session.

This was followed by the Prize Distribution Ceremony, where the Hon'ble Chief Guest gave away prizes to the academically meritorious pupils of the school. The Vote of thanks was proposed. The programme ended at 945 pm with a vote of thanks and National Anthem.
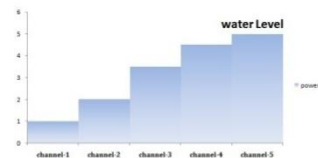
Academic prize winners

Year	Name	Roll.No	Position
I Year	B.N. P. Mani Charitha	16JR1A0403	First
I Year	V. Navya	16JR1A04E2	Second
II Year	L.Divya Supriya	15JR1A0475	First
II Year	M.Naga Suma	15JR1A0482	Second
III Year	Y.Latha Jahnavi	14JR1A04F2	First
III Year	T.Keerthi	14JR1A04D6	Second
IV Year	M.Bindhu Sri	14JR5A0405	First
IV Year	T.Chandana	13JR1A04B7	Second

Student Article:

Analysis of advanced water filling algorithms for Radio Resource Allocation in Cognitive radio networks

Water filling (WF) algorithm is a general name given to the ideas in communication systems design and practice for equalization strategies on communications channels. As the name suggests, just as water finds its level even when filled in one part of a vessel with multiple openings, as a consequence of Pascal's law, the amplifier systems in

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communications network repeaters, or receivers amplify each channel up to the required power level compensating for the channel impairments. In many engineering problems, water-filling plays an important role in radio resource allocation (RRA). For communications, it stems from a class of the problems of maximizing the mutual information between the input and the output of a channel with parallel independent sub-channels. With water-filling, more power is allocated to the channel switch higher gains to maximize the sum of data rates or the capacity of all the channels. For RRA, one of the most typical problems is to solve power allocation using the Conventional water filling (CWF). When we consider different weight of the channels, the problem can be solved using weighted WF algorithm. As communication system develops, the structures of the system models and the corresponding RRA problem sevolve to more advanced and more complicated ones. In thispaper, we apply the concept of WF to solve the generalized RRA problems, which include not only the constraints in the CWF but also more stringent constraints, such as

i). *W*ater-*F*illing with individual *P*eak *P*ower constraints (WFPP); and
ii). a kind of more general form, *G*roup *B*ounded *P*ower constraints (WFGBP).

By/- Ms. Jayasree (14JR1A0416) & Team

Faculty Article:

Implementation Of Barrel Shifter using Diode free Adiabatic Logic (DFAL)

Adiabatic switching techniques based on energy recovery principle are one of the best solutions at circuit and logic level to achieve reduction in power. The main objective of this paper is Low Power Multiplexer design using diode free adiabatic logic and implementation of this logic into barrel shifter. A barrel shifter is a digital circuit that can shift a data word by a specified number of bits. It can be implemented as a sequence of multiplexers (mux), and in such an implementation the output of one mux is connected to the input of the next mux in a way that depends on the shift distance. The number of multiplexer required is $N\log_2 N$. This paper compares conventional CMOS based design with diode free adiabatic logic (DFAL), the simulation is performed using a SPICE circuit simulator at 0.18µm technology node & 1.8V standard CMOS process. Comparison has shown a significant power saving to the extent of 60% in case of diode free adiabatic technique as compared to CMOS logic in 10-100MHz transition frequency range. `

By/- Mr.K.Srinivasarao, Asst. Prof

NCKITS-2018

Department of Electronics and communication engineering, KKR & KSR Institute of Technology and science, Guntur has organized a **National conference on Knowledge Based Inventive Telecommunication System (NCKITS -2018)** on 15th March to 17th March 2018. The prime objective of this conference is to promote research in science between the academic Institute and the industry for improving interdisciplinary cooperation at National level. The conference format includes keynote, oral presentation of scientific and Technical papers. All papers were selected with *Double blind review with binary decision Method*. In 307 papers 74 papers were selected by the reviewers by Double blind review with binary decision Method. The acceptance ratio is **24%.** Conference proceedings inaugurated by Chief Guest Sri. N.V Ramana , Director . Prasara Bharathi, Doordarshan Kendra, Vinayawada.

Key note speech:

The Chief Guest, *Sri. N.V Ramana , Director . Prasara Bharathi, Doordarshan Kendra, Vinayawada*. , in his keynote address, Discussed about **"Current Trends in Telecommunications".** He explained about the invention of Radio, Television, Computer and Wireless technology . He gave clear cut explanation about the types of information which was used in communication. In his lecture he explained Photography Vacuum tubes -1960, Charged couple device (CCD), CMOS (Complementary metal–oxide–semiconductor) and Amorphous Silicon . At the end of the keynote speech he discussed about future technologies like 5G,FIBER EVERYWHERE, Artificial Intelligence, virtualization, vr,ar, everywhere connectivity for IOT & IOE, cognitive networks, big data, cybersecurity, smarter smartphones, connected sensors, network neutrality, internet governance. In the valedictory function, the chief guest honored by the Chairman sir with a Shalv and Memento.

The conference chairs and Co-chairs

Session	Name of the Session Chair	Name of the Co-Chair
I	Dr.M.Suman, Professor in ECM and Deputy Registrar, KLU	Dr. Dr.M.Vasim babu
II	Dr.Shafi Shahsavar Mirza, Professor & H.O.D, Eswar Engineering College	Dr.M.VaseemBabu
II	Dr.Shafi Shahsavar Mirza, Professor and H.O.D, Eswar Engineering College	Dr.Sk.Khamaruddin
IV	Dr.N.Adinarayana, Professor and HOD, Mallineni College of Engineering	Prof.C.Aruna Bala
V	Dr.N.Adinarayana, Professor and HOD, Mallineni College of Engineering	Prof.C.Aruna Bala

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Vote of Thanks was delivered by **Dr. Md. Zia Ur Rahman** Associate Professor of ECE. On behalf of the department of Electronics and communication engineering, the hosting department, He extended her gratitude to the College Management, Principal, Vice Principal, HoD, Delegates, Panelists and Organizing Committee. The Conference came to end with the National Anthem.

Student Placements:

   The following students are placed in Various *Campus Drives. We wish to appreciate for their dedication and commitment to perform with excellence in campus drive. They have proven their abilities and talents. Heartfelt obligation to you and keep your spirits.*

Ms. BODAVULA JAYASREE (14JR1A0416) place in Infosys Campus drive held on 07/03/2018 in Andhra Layola Engineering college , Vijaywada .

- The following students are placed in *EAST INDIA TECHNOLOGIES Campus Drive held in KITS Guntur.*

1)	T. Jaya Kranthi kumar	7)	Kota. Balaji
2)	Anna. Rama Krishna	8)	Bandlamudi. Anil Kumar
3)	Dirisala. Lohith Kumar	9)	Pathan. Aabidkhan
4)	Ala. Subba Rao	10)	Singamaneni Sai Krishna
5)	Damacheral. Venu	11)	T. Suresh Gopi
6)	Naveen Chandu		

- The following students are placed in *WIND CARE TECHNOLOGIES Campus Drive held in KITS Guntur.*

15JR5A0420	*PERLA KUMARA GOPI CHAND*
14JR1A04A4	*KORRAPOLU JAYAPRAKASH REDDY*

Paper Publication:

   Thalluri Amani, Siddireddy Satyaveni, Yarrabothula Durga Bhavani, and Potu Yamini published a paper on "Detection Of Diseases In Fruits And Vegetables Using Image Processing" in International Research Journal of Engineering and Technology (IRJET), Volume: 05 Issue: 03 | Mar-2018.

Faculty Activities :

Dr. Siva Ganaga Prasad presented papers on "Topology Optimization of Dual Octagonal Array antenna for low frequency applications" , "Teaching Learning Based Algorithm for calculating optimal values of Sensing error probability, Throughput and Handoff Blocking Probability in Cognitive Radio", "Energy Efficient Enhanced Tree Structured Compression Model (Et-Cm) For Data Aggregation In Wireless Sensor Networks" in National Conference NCKITS 2018.

Prof. K. Madhu Sudhana Rao presented papers on "Vehicle Tracking and Accident alert system using Arduino", "Design of planar antenna for commercial wireless Applications" and "UWB Hexagonal Patch Antenna Design and Simulation" In National Conference NCKITS 2018

Dr. Md Zia Ur Rahman presented a paper on "Process Techniques For Human Thoracic Electrical Bio-Impedance Using Remote Health Care Systemsin National Conference NCKITS 2018

Prof. V. Murali Krishna presented papers on "Wireless Agriculture Using Bluetooth Module" and "Human brain interfaces based on EMG" in National Conference NCKITS 2018

Dr. M.Vasim Babu presented a paper on "A Secure Image Transmission Using Secure Force Low Complexity Encryption Algorithm With Histrogram Analysis" and "An efficient magnetic resonance brain images classifier using tetrolet transform and kernel support vector machine based on OTSU binarization"in National Conference NCKITS 2018.

Mr. K.Raju, Assoc. Prof presented papers on "Face Recognition system on Raspberry Pi" , "Face Recognition using Local Features", in National Conference NCKITS 2018

Mr. A.Sarath Kumar ,Asst. Prof presented a paper on "Efficient Routing in WSN using Fuzzy Logic" and "Fuzzy Logic Based Clustering To Enhance Energy In Wsn"in National Conference NCKITS 2018.

Mrs. T.Bhavani ,Asst. Prof presented a paper on "Fuzzy Logic Based Clustering To Enhance Energy In Wsn" and "Power Efficient Shift Register Using Non Overlaped Pulsed Clock Signal" in National Conference NCKITS 2018.

Mr. E.Bhanu Prasad ,Asst. Prof presented a paper on "Under water Image Restoration" in National Conference NCKITS 2018

Mr. E.Venkata Narayana presented a paper on "A MATLAB Based Face Recognition System Using Eigenface" , "Under water Image Restoration" and "Solar Based Air Compressor for Inflating Tyres". With his interest he published a paper on "Detection Of Diseases In Fruits And Vegetables Using Image Processing" in International Research Journal of Engineering and Technology (IRJET), Volume: 05 Issue: 03 | Mar-2018.

Mr. Maduguri Sudhir ,Asst. Prof presented papers on "A MATLAB Based Face Recognition System Using Eigenface" and "Solar Based Air Compressor for Inflating Tyres" and "Detection Of Diseases In Fruits And Vegetables Using Image Processing" in National Conference NCKITS 2018. With his interest he published a paper on "Detection Of Diseases In Fruits And Vegetables Using Image Processing" in International Research Journal of Engineering and Technology (IRJET), Volume: 05 Issue: 03 | Mar-2018.

Ms.T.Revathi ,Asst. Prof presented a paper on "Reconfigurable Architecture Of Efficient Dct" in National Conference NCKITS 2018

Mr. T.Venkat Rao ,Asst. Prof presented papers on "Video Surveillance System for Internet of Things (IoT) With Motion Detection using Raspberry Pi Advanced Security System With Using Raspberry Pi With Motion Detection" in National Conference NCKITS

Mr.K. Mallikarjuna Rao,Asst. Prof presented papers on "Design Of High Throughput Prng Using Lfsr" and "Ingenious Helmet based Alcohol Sensing, Vehicle Tracking and Accident Proclamation system Self-Regulatingconveyance System "in National Conference NCKITS 2018

Mr. B.Venu ,Asst. Prof presented papers on "OFDM Performance improvement with Partial Transmit Fetal ECG Extraction from Abdominal ECG Using Bio-Inspired Based On Adaptive Algorithms" and "Fetal Ecg Extraction Using Adaptive Functional Artificial Neural Network Using Rls Algorithm" in National Conference NCKITS 2018

Mrs. P.Sarala ,Asst. Prof presented a paper on "Z-Shape Microstrip Patch Antenna for Wireless Communication" and "Z-Shape Microstrip Patch Antenna for Wireless Communication"in National Conference NCKITS 2018

Mr. K.Murali Krishna ,Asst. Prof presented papers on "An Automatic Wavelet-based Nonlinear Image Enhancement Technique for lung Imagery" in National Conference NCKITS 2018.

Mr. R.Rama Mohan ,Asst. Prof presented paper on "Vehicle speed limit system with password enabled" in National Conference NCKITS 2018.

Mr. B.Brahmaiah ,Asst. Prof presented paper on "Access Control Of Doors In Villa Through Internet Using Raspberrypi" and in National Conference NCKITS 2018.

Mr. T.Bala Krishna ,Asst. Prof presented paper on "Shuffled Svd Based Robust And Secure Digital Image Watermarking" and in National Conference NCKITS 2018.

In fourth Estate:

ప్రయోగాలకు పెద్దపీట వేయాలి

ఇంజినీరింగ్ విద్యార్థులకు సూచన

వటిచెరుకూరు, న్యూస్టుడే: చేశంలోని ఇంజినీరింగ్ విద్యార్థులు ప్రయోగాలకు పెద్దపీట వేయాలని, క్షేత్ర స్థాయిలో అనుభవం సంపాదించాలని. ప్రయోగాలతో కూడిన వైజ్ఞానిక ఉన్నతం కోసం కంపెనీలు, ప్రభుత్వాలు ఎంతో మాన్నస్తున్నాయని విజయవాడ దూరదర్శన్ కేంద్రం డైరెక్టర్ ఎన్.వి రమణ అన్నారు. ప్రయోగాత్మక జ్ఞానం లేని చదువులు సమీక్షిత్రతల కాలే పన్నారు. మండలంలోని విజ్ఞానపాడు కిట్స్ ఇంజినీ

రింగ్ కళాశాలలో గురువారం కంప్యూటర్ సైన్స్ అధ్వర్యంలో బెస్ట్ ఇన్నోవేటివ్ టెలికమ్యూనికేషన్ సిస్టమ్స్పై జరిగిన రెండో జాతీయ సదస్సులో ఆయన ముఖ్యఅతిథిగా పాల్గొని పలు సూచనలు చేశారు. చదువుకునే సమయంలోనే పరిశోధనలపై విద్యార్థులు దృష్టి సారించాలని చెప్పారు. పరిశోధనతో కూడిన చదువులకు డైరెక్ట్ ఎంప్లాయ్మెంట్ ఉపయోగపడతాయని తెలిపారు. జాతీయ, అంతర్జాతీయ ఆర్జ్యాల్లో విద్యార్థులు వ్యాసాలు రాయాలని చెప్పారు. వీటివల్ల బహుళ ప్రయోజనాలు ఉంటాయన్నారు. గ్రామీణ ప్రాంతాలలో మొబైల్ ఫోన్స్ వినియోగం పెరుగుదల, 80శాతం మంది ఫోన్లు వాడుతున్నారని చెప్పారు. ఇదే రకమౌ ఫోన్ల వినియోగం మరింత వేగంమందుతో న... ఈ రంగంలో విద్యార్థులు పని చేయలేక చేసే ఉపాధి కల్పించుకోవచ్చు నారు. సదస్సుకు కిట్స్ వైర్లెస్ కోర్ సుబ్బారావు, కార్యదర్శి కోయిఖోర్, ప్రిన్సిపల్ పి.బాబు, కంప్యూటర్ సైన్స్ విభాగాధిపతి కిరణ్గత్తయ్. ప్రొఫె సర్ రవ్రాస్ ప్రసంగించారు.

జ్యోతి వెలిగించి సదస్సు ప్రారంభిస్తున్న దూరదర్శన్ డైరెక్టర్ ఎన్.వి.రమణ

ANDHRA PRABHA
31-3-2018

కిట్స్ కళాశాలకు ప్రతిష్టాత్మకమైన 'ఎన్టీఏ' గుర్తింపు

మ్యాట్స్ స్టేటస్

మంజూరుపరచు కిట్స్ కళాశాల యాజమాన్యం

గుంటూరు ఎడ్యుకేషన్, మార్చి 30 (ప్రభ న్యూస్) : ప్రాంతీయ వింజ నంపాడు గ్రామం నందు కిట్స్ ఇంజినీరింగ్ విద్యను అందిం చ

DECCAN CHRONICLE
31-3-2018

NBA ACCREDITATION TO HELP STUDENTS

DC CORRESPONDENT
GUNTUR, MARCH 30

Students of KITS engineering college were asked to study with dedication and improve their technical skills to grab opportunities in today's competitive world during a meeting at Vinjanampadu of Guntur on Friday.

KITS chairman K. Subba Rao said that students are getting placed with good academic, technical knowledge and skills. He said that the National Board of Accreditation (NBA) accredited CSE, ECE, EEE and mechanical branches this year and this accreditation will help both college and students.

He said that KITS got a permanent affiliation from JNTU Kakinada in 2017 and now, has got NBA accreditation for four branches. He said that coaching and training will help students achieve ranks in Graduate Aptitude Test in Engineering (GATE), GRE, TOEFL, CAT and other competitive exams and asked students to make good use of coaching, training and workshops like hackathons.