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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING (ECE)

EXPLORE, DREAM, DISCOVER



MONTHLY **NEWS**LETTER

GENESIS

IGNITING THOUGHTS

JUNE 2021 ISSUE 41



VISION

To be recognized at the national and international level for excellence in Education and Research in Electronics and Communication Engineering.

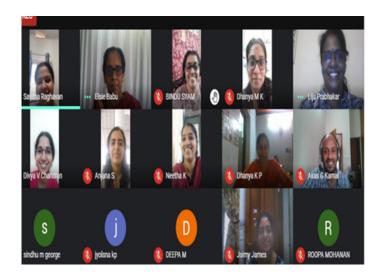
MISSION

- Inculcating leadership qualities, adaptability, and ethical values.
- Imparting quality education in the field of electronics, communication, and related areas to meet the challenges in the industry, academia, and research.
- Nurture the growth of each individual by providing a dynamic and conducive learning environment.

DEPARTMENT ACTIVITIES/ACHIEVEMENT

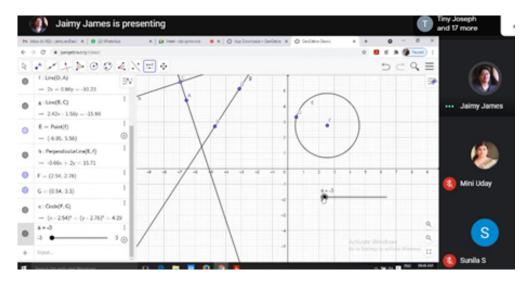
UDDYOTHANA

The prestigious department event, Uddyotana 2K21, version 4, was conducted from 27/05/2020 to 28/05/2021 with an aim to enlighten the higher secondary mathematics teachers with modern engineering tools and applications. The workshop was organized by the Department of ECE as a part of the school outreach program. Teachers from various reputed schools all over Kerala participated in the workshop. Active participation of the participants led to exchange of ideas in the area of "Applications of mathematics in Engineering".



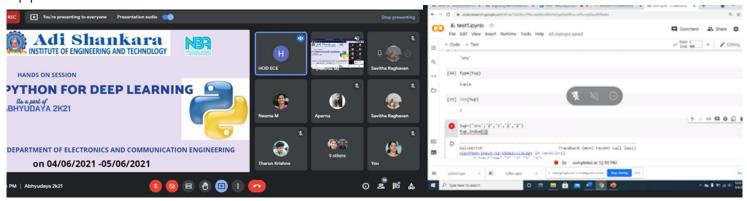


The resource persons were the faculty members within the department of ECE. The topics covered, which was enveloped using the GeoGebra tool, is a part of the of present plus two curriculum. The participant teachers unanimously appreciated the teaching strategy and the feedback was impressive. The program has proved to be, and also, will be, a benefit to plus two students as the participant teachers would be enriched with the concept of teaching mathematics using modern tools. The event was Coordinated by Ms. Savitha Raghavan and Ms. Neetha K, Assistant Professors, Dept of ECE.



ABHYUDHAYA 2K21

Another successfully acclaimed event, Abhyudhaya 2K21, was conducted by the department from 04/06/2020 to 05/062021 with an aim to bridge the technical gap between the school and college level academics. The program is organized with an obligation to develop design mindset skills, inculcate computational thinking in young minds and also to help the students to learn and understand machine learning approaches, scaling up machine learning techniques focusing on industry applications.

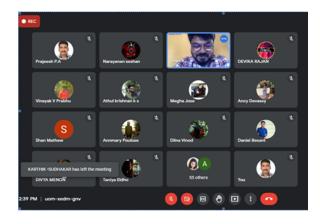


The workshop was conducted as a part of the school outreach program under the Department of ECE. Students from various reputed schools all over India participated in the workshop and the resource persons were the faculty members from the department. Active participation of the participants led to the exchange of ideas in the topic "Python for Deep Learning". The students who participated appreciated the teaching strategy with imposing feedbacks. The event was Coordinated by Ms. Savitha Raghavan and Ms. Neetha K, Assistant Professors, Dept of ECE.

TALK ON SPEAK OUT AND REACH OUT AT YOUR GOALS

The Electronics and communication engineering department of Adi Shankara Institute of Engineering and Technology organized a webinar on "TALK ON SPEAK OUT AND REACH OUT AT YOUR GOALS". The speaker for the session was Ms. Unnikrishnan S. He is the Cluster Head at Extramarks Education India Pvt Ltd.

The session started with an introduction speech given by Mr Narayanan Seshan. Mr. Unnikrishnan S later proceeded with the session. He emphasized the importance of having goal set and said we should work according to our goal. He asked us to be informed about all the necessary skills we need and he also told about different competitive exams and specializations.



It was an interactive session, the students interacted with the speaker asking their doubts and many questions related to choosing their career. The session concluded with a vote of thanks given by Ms Devika. The session was coordinated by Er.Prajeesh P A and Er. Archana Aniyan

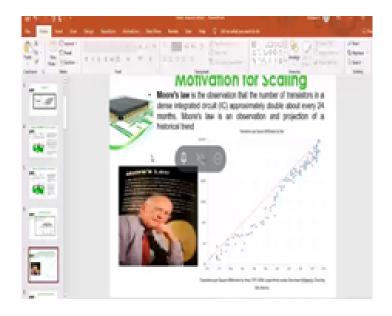
RESEARCH SEMINAR

A. The tenth online research seminar, conducted by the department of Electronics delivered by Er. Jayesh TP on the topic and Communication Engineeringwas "Remote I/O Data Acquisition system" on 27/05/2021. He elaborated on all kinds of electrical and thermal parameters such as voltage, thermocouple, RTD etc. The measured data could be displayed on an LCD and can be transmitted through Ethernet network to remote DAS monitoring system by TCP/IP protocol. These systems have long-distance communication functions, which would ensure the rejection capability and reliability of the network. The new generation remote data acquisition and monitoring systems based on the high-performance embedded ARM microprocessor, has numerous significances. Some major advantages of the system such as adaptability to the strict requirements of the data acquisition system, function, reliability, cost, size, power consumption, were illustrated.

B. The eleventh online research seminar conducted by department of Electronics and Communication Engineering delivered by Er. Arya paul on the topic "Research Directions of Wireless Networks towards IoT" on 31/05/2021. The session mainly focused on various research prospects in the field of IoT. seminar started with fundamentals of IoT and its requirement aspects. The importance of Software Defined Networking (SDN) and Edge



computing were the primary discussions in the seminar. The current research challenges in the field were highlighted. She also aroused the listener's interest by giving an insight into the current tools and techniques in these fields.



The twelfth Research conducted by Department of Electronics Communication Engineering and through Google meet was by Er. Remya Ramesh on Monday, 31-05-2021. Presentation was on the topic "Short Channel Effects in MOSFETS".The session mainly focused on various research issues in downscaling of MOSFET channel beyond 9nm. Beginning with MOSFET scaling and Moore's law ,the presentation took the audience through various scaling issues and it's solution.

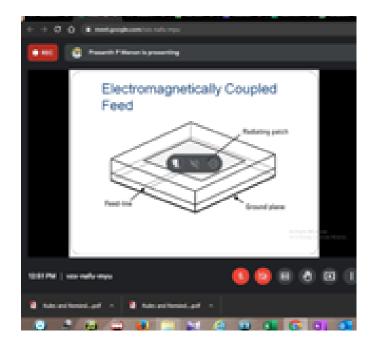
Since 'Moore's law still alive ' is the hottest topic in Semiconductor Research, the presentation was concluded with the hope that there are alternatives to channel materials and substrate architectures that comes under Beyond Moore. Simulation results of various device modelling architectures were also introduced.

D. The Thirteenth research seminar conducted by department of Electronics and Communication Engineering through Google meet was delivered by Er. Prajeesh P A on Wednesday, 02-06-2021 .Presentation was topic "Multiply on the accumulate Unit and its application to double throughput MAC".

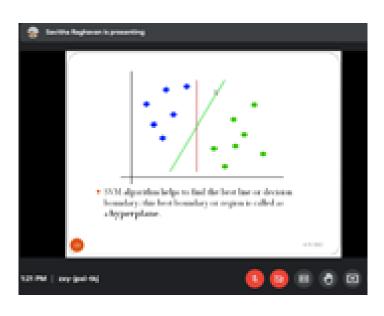


The session mainly focused on various research prospects in Multipier and Multiply accumulate unit. Starting out with a brief introduction ,presentation took the audience through various algorithms used for multiplication and application of twin precision multiplication to double throughput MAC unit .Simulation results of various architectures were also introduced

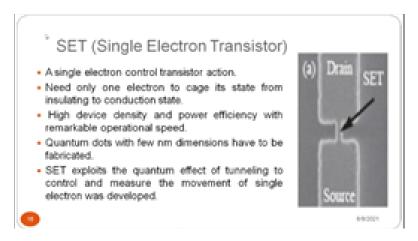
E. In the fourteenth research seminar titled "Numerical analysis of S-shaped Microstrip using IFTD" handled by Antenna Prasanth P Menon on June 4th , he emphasized the design techniques of S shaped patch antennas . The various characteristics of a double sheet that utilizes dual frequency of S-Shaped microstrip patch antenna FDTD techniques were depicted to attain acceptable impedance, depending on the design parameters and technical analysis. Using FDTD techniques, the dielectric constant and substrate height for different antenna parameters were shown tested. The FDTD approach is evaluate the recommended to structure on the basis of a differentiation between numerical and experimental testing.



fifteenth F. The research seminar conducted by department of Electronics and Communication Engineering through Google meet was delivered by Er. Savitha Raghavan on Tuesday, 08-06-2021 .Presentation was on the topic Classification "Data using SVM".The mainly focused on various session research prospects in machine learning and using support vector machine. Starting out with a brief introduction presentation took the audience through various classification techniques used data classifier .Various regression algorithms were also introduced



G. The sixteenth research seminar conducted by department of Electronics and Communication Engineering through Google meet was delivered by Er. Archana Aniyan on Tuesday, 08-06-2021 .Presentation was on the topic "Introduction To mainly focused on scope and application of Nanoelectronics ".The session Nanoelecronics – a promising technology to continue the miniaturization of ICs by enhanced functionality, higher speed, and reduced power consumption.



Also gave an introduction about Spintronics, which make use of magnetic properties of materials along with wave like nature of electrons in nano dimension to produce spin polatized currents which drive a new class of beyond CMOS components including magnetic field sensors, non-volatile memories and RF devices.

H. The Seventeenth research seminar of the Department of Electronics and Communication Engineering was delivered by Ms. Aswathy N, Assistant Professor ECE on the topic "Need for Fault Tolerant FPGA: A Review" on 14th June 2021 through google meet.

The session focused on the need for making our commercial FPGA a radiation tolerant. The researches being done in premier institutes and industries in the field of Fault modelling, Radiation Mitigation Techniques, Low power FPGA discussed. Reconfiguration were scenario and various career opportunities in India was briefed. She also mentioned applications, where essential for computations.

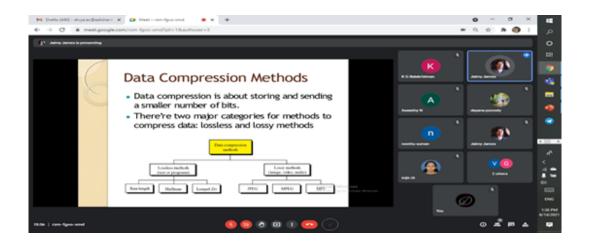


I. The Eighteenth research seminar conducted by department of Electronics and Communication Engineering through Google meet was delivered by Er. Divya V Chandran on Monday, 14-06-2021 .Presentation was on the topic "Remote sensing - applications and opportunities.



The session mainly focused on various research prospects in different areas in Remote sensing. Starting with a brief introduction ,the presentation explained how the images can be collected and also showcased images from various satellites. Applications of Remote sensing ,overall methodologies followed and it's research related areas were also explained

J. The nineteenth online research seminar conducted by department of Electronics and Communication Engineering was delivered by Er. Jaimy James on Monday, 14-06-2021. Presentation was on the topic "Data Compression Techniques in VLSI". The session mainly focused on various research prospects in different areas in VLSI where data compression is used. Starting out with a brief introduction. presentation took the audience through explaining how the data compression is achieved. Various applications of data compression techniques and it's research related areas were also explained



The Twentieth research seminar of the department of Electronics and Communication Engineering was delivered by Ms. Neethu Suman, Assistant Professor, Department of Electronics and Communication Engineering on the topic "Smart Health Monitoring System" on Thursday, 24-06-2021 through google meet. The session briefed on the typical architecture of the smart health monitoring system and its variants such as wearable health monitoring system, mobile health monitoring system and remote health monitoring system. Ongoing research areas and applications of smart health monitoring system was also discussed.



KTU UNVERSITY EXAM TOPPERS (S7)



STUDENT PROJECT SCHEME 2020-21

Proud to announce that the student team- Krishnaraj R, Megha Sunil, Nihala Suman M N and Rose Mart Benedict Of S 8 ECB received a financial assistance of Rs. 16,500 under the Student Project Scheme of APJ Abdul Kalam Technological University . Faculty investigator of the team was Dr. Bipin P R, Associate Professor Dept. Of ECE.



TOYCATHON -2021

Happy to announce that -Ms.Neetha.K Ms.Remya Ramesh Assistant professors, Department of ECE, ASIET are selected as the evaluators for "Toycathon-2021" Grand Finaleconducted by the Ministry of Education's Innovation Cell and AICTE.







We congratulate all the successful student who got placed in various companies this year



🗚nila Shenoy



Devika Rajan



Santhosh Sivan

Placed at

accenture Batch 2017-21



Pankaj Kumar Dwivedi



Sankalp Mohan K K



Taniya Eldho



Akshay Divakar

Placed at



Batch 2017-21











Devika Rajan

Ananthakrishna Bhat

Taniya Eldho

Lizbeth Shaji

2017-21 Batch

For getting placed at **Poornam Info Vision**







Balakrishnan R

For getting placed at NeST Digital (P) Ltd.





TECH TALKS

TEACHER'S ZONE

AUTHOR:

Dr. Bobby Mathews.

Professor.

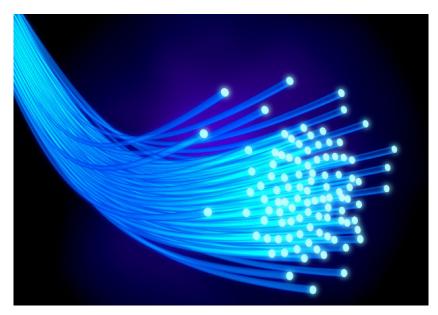
Department of Electronics and Communication Engineering



OPTICAL FIBER: A STRAND THAT REVOLUTIONIZED THE WORLD

The Beginning

During the early days of the second half of the last century; there was an increasing need to transmit big volumes of data and conversations over long distances at an appreciable investment. The term "fiber optics" had been coined in the 1960s and was originally used to refer the light intensifiers used in medical equipment, and cathode ray tubes (CRT in TV) to guide light. The success of light intensifiers was limited to short distances of about 20 meters (after which, the signal dissipated almost entirely.



It was then; Charles K Kao and G C Hockham, two physicists from Standard Telecommunication Laboratories, a research facility at Essex, England proposed the possibility of light transmission in optical strands if the impurity level in the waveguide can be reduced to a lower level. (Proc. IEE, Vol. 113, No.7, July1966). They were the first to dream of a world connected by light, through optical fibres. In the above seminal paper, they pointed out that, optical fibres are potentially far superior to copper cable. The problem was with the impurities in glass, which caused the signal loss which scientists call "attenuation". The challenge was to find a "low- loss fiber with purer glass" that could carry light to longer distances without any appreciable loss. They hypothesized; "thin strands of purified the glass fibers, would be capable of carrying huge amounts of data over long

distances with minimal signal loss". Dr. Kao (19933-2018) was honoured with the Nobel Prize for Physics in the year 2009.

But the real problem dwelled across the entire research community for a quiet long time. The technique to make such a purified fiber was not known. Physicist Robert Maurer along with his two junior researchers Donald Keck, an experimental physicist, and Peter Schultz, a glass chemist, from the laboratories of Corning Inc., USA; came up with a new type of fiber in August 1970 with light pulsing through at a measured loss between 16 and 17 dB, which was lesser than the limit of 20 dB proposed by Kao and Hockham. "Optical Waveguide Fibers", as its inventors described it in their U.S. patent # 3711262, was a fiber capable of carrying 65000 times more information than copper wire. Nine years later, Corning Inc. began the mass production of opticalfibers.

Optical Fiber Network Flourishes

Still, it took many more years to lay optical cable under the ocean, connecting and providing a way for people to have communication at lower costs. The technology has refined over the past years to such an extent that the fiber fabrication technology has come a great extent. In the due course of time, the under water fiber optic cable network connecting various continents has become the backbone of all the communication in world which led to wild growth

of internet and allied services making our Earth literally a Global Village. Nowadays optical fibers are made with multiple cores, transmitting innumerous amount of data simultaneously through these interconnected optical fiber networks, both on land and under water.

Recent Trends - High Speed and High Capacity

The fabrication technology germinated at the labs of Corning has developed and matured through the continuous experimentations and modifications. Along with these advancements in optical fiber fabrication, the entire telecommunication technology also got revolutionized to support the increased demand for greater speed and efficiency.

Over the past few decades drastic and highly efficient transmission schemes and protocols were developed and implemented with the help of better and advanced optical devices. New components, such as reconfigurable optical add/drop multiplexers, optical

couplers and optical switches, were introduced to facilitate the needs of All Optical Networks (AON). These new components allow data to be transmitted quickly without any electrical processing, which resulted in extended transmission distances at greater accuracies.

To mitigate efficient communication, Modulation Schemes such as on-off keying (OOK), forward error correction (FEC), pulse width modulation (PWM), pulse position modulation (PPM), digital pulse interval modulation (DPIM), binary phase-shift keying (BPSK), low-density parity-check codes, and spatial diversity

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING (ECE)

were developed and deployed in the field; even from the early stage of fiber optic communication.

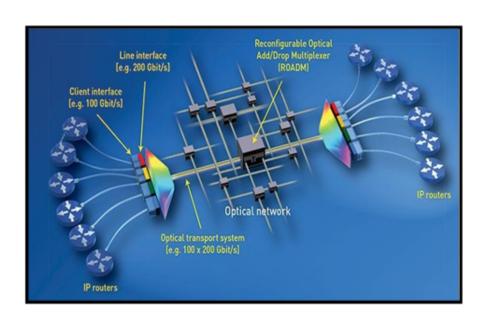
Demands for speedier optical transmission technology watered further developments which led to the increase in capacity, complexity and utility day by day. Advanced modulation formats, such as dual polarization-1024-levelquadrature amplitude modulation etc. along with ultra-fast digital-to-analog conversion and channel multiplexing techniques like Dense Wavelength Division Multiplexing (DWDM) were introduced to cater these increasing demands.

The Super-Channel Technology also provides a feasible solution offering very long-distance links with data capacity at reliable speed. large performance.

This multiple subcarriers data transmission over a single- channel using Dual Polarization-Quadrature Phase Shift Keying (DP-QPSK) along with the possibilities of Digital Signal Processing (DSP) has demonstrated more than 100 Gbps capacity over a single channel. Experiments demonstrated the transmission of 1 Tbps data over a 7200 km transoceanic link using another technique called Digital Nyquist- WDMSuper-Channel.

Another real-time experiment recorded 1.232 Tbps using DP-QPSK signals with a noise-suppressed Nyquist-WDM super-channel transmission over 2100 km singlemode fiber link with DSP at the receiver terminal for enhanced performance.

In 2020 Japan's National Institute for Communications Technology (NICT) has demonstrated a 172Tbps (terabits per second) (0.172Peta bits per second) transmission speed through a single mode multicore fiber (More than the combined throughput of all the fibers in the world's highest-capacity submarine cable)

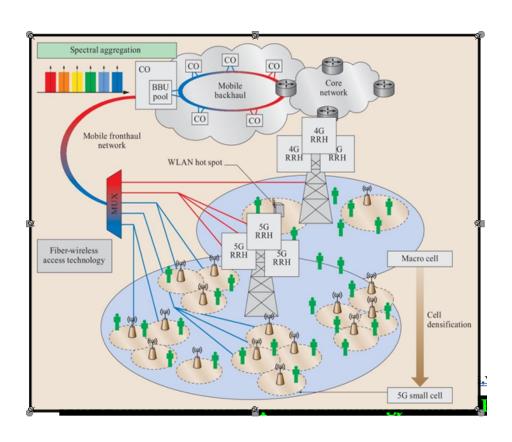


Future and Challenges Ahead

There are some harsh realities and challenges that fiber technology needs to address moving forward. The complex trenching and building process in laying the cable is very costly. Another problem is logistic challenges to connect distant locations through fiber. It is needed to create a long-haul network. However, a fiber cable cannot be simply stretched straight from one point to another. About every 100kms, the connection needs to be re- amplified using an ILA Amplification), which is costlier and difficult to maintain. This issue is partially addressed by the development of EDFA (Erbium-Doped Fiber Amplifier) which has already hit the market for large scale deployment.

Fiber optics has been very widely adopted today by many industries, and the future is certainly positive going forward. As these networks continue to expand and user load continues to increase, the future of optical fiber technology is bright. Additionally, the roll out and expansions of 5G Wireless Technology was made possible by only with the help of existing optical fiber networks. Rather the fiber optic network is the real backbone of the 5G technology and caters its current transmission demands.

Telecom leaders are relying on millions of kilometers of fiber optic cables which allow 5G devices across the globe to connect with one another. But, as the reach and demand of 5G increases, more and more fiber optic links with higher capacity &faster transmission will become a necessity in the future. In this regard is likely to see new fiber initiatives in more diverse and efficient applications, which The Future of Fiber Optic Technology More OPTIMISTIC.



TECH TALKS

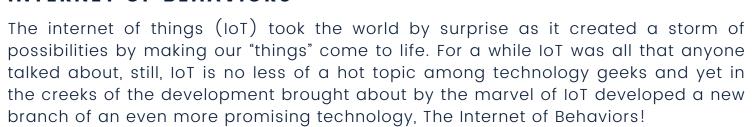
STUDENTS'S ZONE

AUTHOR:

Ajmal Ali(s6 ECA)

Department of Electronics and Communication Engineering

INTERNET OF BEHAVIORS





The Internet of Behaviors simply put, is a modelling of the behavioural pattern of users via intelligent analytics of collected data with the help of tips and tricks from the deep books of behavioural sciences. With our appliances being transformed into intelligent systems able to communicate with each other via the internet, without realising it we have unfortunately kissed goodbye to privacy. All the data that is collected by these devices are used as the raw input data into the behavioural modelling algorithm that remains at the other end of your unsuspecting Amazon echo!

The IoB ecosystem is programmed to capture as much useful data as is possible from us to create intelligent rewards to promote favorable actions and in the process influences the way we think and act. Big companies have forever been tracking our actions to develop and improve the user experience but the difference with Internet of Behaviors is the massive scale of collected data and the altogether different approach of marketing that is designed to exploit the neurological wiring of the human brain.

The data collected from the user include personal information such as the shopping patterns, the places you visit, the type of food you favour, what kind of videos you watch, how often the ads targeted at you are converted into profits by different agencies, what political parties you tend to favour etc. all of which are different variables of input fed to behavioural modelling algorithms which are then used to create an accurate virtual presence of the customer that can predict and influence their behaviour and even manipulate it for personal gains.

Sounds terrifying or exciting? Well that kind of depends on who you are, if you are a tech giant that is knee-deep into the field of IoT, you have hit the jackpot! If you are on the other hand a normal working citizen like myself who genuinely wants to blend into the technological world by installing fancy stuff in your apartment, this can be quite unsettling.



STAFF ACHIEVEMENT AND PARTICIPATION

Dr.Ragesh G K

- Resource person for ATAL_FDP-" Embedding AI in Smart Sensors" and delivered a lecture on "Smart Sensor Applications organized by the Department of Electronic and Instrumentation Engineering, Sri Ramakrishna Engineering College Coimbatore on 09-06-21.
- Acted as an External Reviewer, International Journal of Innovation in computational Science & Engineering on 26-27 May,2021 by Information Technology Department,University of Technology and Applied Science,MUSCAT

Dr. Bobby Mathews C

- Participated in an FDP on Recent Developments in Machine Learning and Data Science by ToCH Institute Ernakulam from 02.06.21 to 04.06.21
- Technical committee member at Maker Village, KTIZ, Kinfra Hi-Tech Park, Kalamassery, Kochi from 20.05.21 to 21.05.21
- Attended an Online Course on No Code Website development Workshop ,05.06.21 by One Team Solutions.
- Attended a Webinar on Cognitive and Personal Dimensions of Cyber Learning on 07.06.21 by AE College of Engg. Chennai
- Attended a Webinar on Effective Communication for Organization's Excellence on 11.06.21 by AE College of Engg. Chennai

Dr. Bipin P R

Attended an Online Course on Course on Machine Learning Model Deployment" by GL Academy on May 2021.

Dr. Suraj Damodaran

Attended the webinar on "Ventilator: Design Perspective" by Mr. Sarath S Nair Scientist / Engineer-E, Sree Chitra Tirunal Institute for Medical Science and Technology(SCTIMST) on 26/5/2021

Dr. Arya Devi

Participated in a Faculty Development Program (FDP) on GEOINFORMATICS AND WEB TECHNOLOGIES on 18/5/2021-22/05/2021 by BANASTHALI VIDYAPITH, Rajasthan

Mr.Ajay Kumar

Acted as an External Reviewer, International Journal of Innovation in computational Science & Engineering on 26-27 May,2021 by Information Technology Department,University of Technology and Applied Science,MUSCAT

Ms. Neethu Suman

Recourse Person Online Workshop on Python for Deep Learning on 4/6/21 to 5/6/21 by Dept.of ECE,ASIET

Ms Remya Ramesh

- Resource Person for the Online Workshop on "Python for Deep Learning " on 4/6/2021 to 5/6/2021 by Department of ECE,ASIET
- Attended Webinar on "CORONA: PRECAUTION AND PREVENTION" on 6/6/2021 by NSS unit no: 228,582 of Adi Shankara Institute of Engineering and Technology, Kalady
- Evaluator for the Power Judging Evaluator panel of Toycathon 2021, from 22/6/21 to 24/6/21 by Ministry of Education's Innovation Cell and AICTE.

Mr Prajeesh P A

- Attended Faculty Development Program(FDP) on Innovation Incubation and research challenges in India
- Co-coordinator for the webinar on Speak out and reach your goals

Ms. Archana Aniyan

- AttendedWebinar on "Spintronics" on June 4th 2021 by the Department Of Electrical And Electronics Engineering Christ College Of Engineering, Irinjalakuda
- Recourse Person for Online Training Program on Geogebra" on 27/05/2021 to 28/05/2021 by Department of Electronics and Communication Engineering, ASIET Kalady

Ms. Aswathy N

- Attended Faculty Development Program(FDP) onStarting Research From Scratch from 24-28 May 2021 by KITS, Coimbatore
- AttendedWebinar on Custom Face Recognition Using YOLO.V3 13-14 May 2021 by KITS, Coimbatore.

Mr Prasanth P Menon

- Attended Faculty Development Program(FDP) on "Innovation Incubation and research challenges in India" from 21/06/2021 to 25/06/2021 organized by IES College of Engineering.
- Resource Person for Online Training Program on Geogebra" on 27/05/2021 to 28/05/2021 by Department of Electronics and Communication Engineering, ASIET Kalady
- Coordinator for the webinar conducted in association with Beacon industries on EV battery charging technology and control strategies on 31/05/2021.

Ms Divya V Chandran

- AttendedOnline Course on SAR Data Processing on7th to 28th May 2021 on Indian Institute of Remote Sensing (IIRS), ISRO, Dehradun, Uttarakhand
- Recourse Person for Online Training Program on Geogebra" on 27/05/2021 to 28/05/2021 by Department of Electronics and Communication Engineering, ASIET Kalady
- AttendedFaculty Development Program(FDP) on 5 Days Online Workshop/FDP on

- 'Starting Research from Scratch' on 24th to 28th May 2021 by Department of CSE, Karunya Institute of Technology & Sciences , Coimbatore.
- AttendedWebinar on CORONA: PRECAUTION AND PREVENTION on 06.06.2021 by organized by NSS, Adi Shankara Institute of Engineering and Technology, Kalady, Kerala.

Ms Neetha K

- ParticipatedKTU sponsored FDP on Recent Developments in Machine Learning and Data Science by ToCH Institute Ernakulam from 02.06.21 to 04.06.21
- Completed Online Course on DEEP LEARNING ON RAMP on 6/06/21 by MATH WORKS.
- Recourse Person as Evaluation panel of Toycathon 2021, on 22/6/21 to 24/6/21 by Ministry of Education's Innovation Cell and AICTE.
- Coordinator for the School outreach programs Udyothana 2K21and Abhyudaya 2K21

Ms Arya Paul

- Recourse Person Online Workshop on Python for Deep Learning on 4/6/21 to 5/6/21 by Dept. of ECE,ASIET
- Acted as an External Reviewer, International Journal of Innovation in Computational Science & Engineering on 26-27 May 2021 by Information Technology Department, University of Technology and Applied Science, MUSCAT
- Selected as I2P contest best idea pitch project mentor

Mr Anuroop K B

- Successfully delivered a session on "Technology Innovation and Entrepreneurship "for the students of St Alosyous HSS North Paravoor.
- Resource person for a webinar on "Introduction to 3-D Modelling &3-D Printing" organized by IEEE Students branch College of Engineering, Vatakara exclusively for IEEE members.
- Successfully completed the design of a PulseOximeter .
- Resource person for a webinar session on "Introduction to IoT and IIoT" organized by Department of CSE in association with IoT Research Lab, ASIET.

STUDENT ACHIEVEMENT AND PARTICIPATION

Student Batch	Name	Title of Course/Event attended	Conducted By	Date
2018-22	DANIEL BESANT	ELECTRIC AND FUTURE MOBILITY	MAR ATHANASIUS COLLEGE	5/22/2021
		INTERNSHIP ON ROBOTICS AND EMBEDDED SYSTEMS	TECHBYHEART INDIA PVT LTD	4/16/2021
2019-23	SOHITH KRISHNA.S	LOGO MAKING COMPENSATION,ORION3RD POSITION	IEEE PES	5/29/2021
2018-22	ASHWIN MB	ELECTRIC AND FUTURE MOBILITY	BERIKE INNOVATION	5/22/2021
2018-22	ATHULYA R	NATIONAL EVENT -"ELECTRIC AND FUTURE MOBILITY"	ORGANIZED BY BERIKE INNOVATIONS AS A PART OF TAKSHAK .ONLINE	5/22/2021
2020- 24	SATHYAJITH S	ELECTRIC AND FUTURE MOBILITY - NATIONAL LEVEL EVENT	BERIKE INNOVATIONS	5/22/2021
2020- 24	MEENAKSHI SHAJI	MACHINE LEARNING FOR WIRELESS COMMUNICATION	IEEE ITS BANGALORE	06-08-21
		APPLICATION TOWARDS INDOOR/OUTDOOR LOCALIZATION TECHNIQUES USING RADIO FREQUENCY ENGINEERING	IEEE CAS SOCIETY BANGALORE	6/15/2021
		HOW TO PUBLISH A GRADE/SCI INDEXED JOURNALS	IEEE STUDENT BRANCH GSSS MYSURU	6/14/2021
		ENVIRONMENTAL SCIENCE	PHYSICS DEPARTMENT AND SCIENCE FORUM	06-05-21
		RECENT DEVELOPMENT IN THE SCIENCE OF METAMATERIALS &NAVIGATING THE METAMATERIALS LANDSCAPE	IEEE MTTS KERALA CHAPTERS AND IEEE APS & MTTS SBC GECBH	5/21/2021
		EVENT AMBASSADOR	ISA SB ASIET	06-01-21
		ONLINE QUIZ ON ENVIRONMENTAL SCIENCE ORGANIZED BY DEPARTMENT OF PHYSICS AND SCIENCE FORUM	SREE SANKARA VIDYAPEETOM COLLEGE	06-05-21

2020- 24	LIYA SAM	AMBASIDOR FOR MOMENTUM 2K21	ISA SB ASIET	06-01-21
2020- 24	MALAVIKA S MENON	AMBASIDOR FOR MOMENTUM 2K21	ISA SB ASIET	07-01-21
2020- 24	SNEHA KISHORE	EVENT "DEMISTIFY"	GOVT. ENNGINEERING COLLEGE ,KANNUR	06-10-21
2020- 24	RAVEENA A	PRODUCT DEVELOPMENT WORKSHOP	ICT ACADEMY	5/18/2021
2019-	P S INDRAJA	YOUNG INNOVATIVE PROGRAM(YIP)-2020	KERALA DEVELOPMENT AND INNOVATION STRATEGIC COUNCIL (K-DISC)	6/22/2021
		TESORO ONLINE EVENT	VISWAJYOTHI COLLEGE OF ENGINEERING AND TECHNOLOGY	06-12-21
2018- 22	CHRIS K SHILY	GRAPHICS DESIGN WORKSHOP	DARKEYE DESIGNS	06-05-21
2019-	SONA PAUL	ECOSYSTEM RESTORATION	NSS UNIT	06-05-21
23		CORONA:PRECAUTION AND PREVENTION	NSS UNIT	06-06-21
2020- 24	ADARSH VINOD	INTERNATIONAL ANTI TOBACCO DAY WORD CONTEST	NSS	5/31/2021
		ECOSYSTEM RESTORATION	NSS UNIT 228, 582	06-05-21
2020- 24	FATHIMA MUHSINA V. A	12P CONTEST (IDEA PITCHING COMPETITION)	ADI SHANKARA	06-04-21
2020- 24	ANJANA RAVEENDRAN	XTRINIA	IEEE SB OF MEA ENGINEERING COLLEGE	06-11-21
		ROBOTICS AND AUTOMATION	IEEE RAS SBC MESCE	06-12-21
		PYTHON AND MACHINE LEARNING BOOTCAMP	SHAPE AI	06-07-21
		1)NATIONAL LEVEL EVENT TAKSHAK.ONLINE BY MACE, KOTHAMAMGLAM IN ASSOCIATION WITH PRAVAIG, KSEB, KERALA VOLVO	MACE,KOTHAMAMGLAM	5/22/2021
		PYTHON AND MACHIN LEARNING	SHAPE AI	06-07-21

2020-	ATHIRA B	ECOSYSTEM RESTORATION	NSS	06-05-21
24		INTERAGIR	BETQ MICROSOFT LEARN STUDENT AMBASSADOR	5/13/2021
		IDEA PITCHING COMPETITION	ADI SHANKARA	06-04-21
2020- 24	JAISON T POULOSE	INTRODUCTION TO ROBOTICS & AUTOMATION	IEEE RAS SBC MESCE	08-12-21
2020- 24	ANUSREE A R	XTRINIA 3.0	IEEE SB OF MEA ENGINEERING COLLEGE, PERINTHALMANNA	06-11-21
		ALORA	STB 64201, PE31	05-07-21
		MS OFFICE	IEEE MEA SB	5/23/2021
		I2P	ASIET	06-11-21
		INTRODUCTION TO ROBOTICS AND AUTOMATION WEBMINAR	IEEE RAS SBC MESCE	06-12-21
2018- 22	ASHWIN MB	XTRINIA 3.0	IEEE	6/13/2021
2020-	DILNA DAVIS	ALORA, ANTITOBACCO WORD QUIZ,INTERNATIONAL YOGA DAY,ECOSYSTEM RESTORATION,KMEA COLLEAGE TOBACCO DAY QUIZ,CORONA PREVENTION AND PRECUATIONS,LET'S LOCK THEM	NSS, IEEE	Jun-21
		YUGEN QUIZ ENVIRONMENT DAY	NSS UNIT NO 120	06-07-21
2020- 22	ALEENA ANTONY	CERTIFICATE OF PARTICIPATION (NSS YUGEN QUIZ COMPATION)	NSS UNIT NO 120	06-07-21
2020- 22	ANNMARIA POULOSE	CERTIFICATE OF PARTICIPATION (CORONA PRECAUTION)	NSS UNIT NO 228	06-06-21
		CERTIFICATE OF PARTICIPATION	EPISTEME	06-05-21
		CERTIFICATE OF PARTICIPATION (ECOSYSTEM RESTORATION)	NSS UNIT NO 228	06-05-21
		KMEA ENGINEERING COLLEGE NSS UNIT 226 ANTI TOBACCO QUIZ CONTEST	NSS UNIT 226	5/31/2021
		CERTIFICATE OF APPRECIATION (TUNE IN)	NSS UNITS OF TKM INSTITUTE OF	06-07-21

		CERTIFICATE OF EXCELLENCE	COINCENT (ECELL AMBASSADOR)	5/21/2021
		CERTIFICATE OF PARTICIPATION (LET'S LOCK THEM)	NSS UNIT NO 168 AND 263	5/24/2021
		FIRST PRIZE IN SHORT VIDEO CONTEST	NATIONAL LEEL IRTUAL TECHNO CULTURAL FEST AGREYA 2021,SNGIST GROUP OF INSTITUTIONS	June - July 2021
		SHORT VIDEO COMPETITION	NATIONAL LEEL IRTUAL TECHNO CULTURAL FEST AGREYA 2021, SNGIST GROUP OF INSTITUTIONS SNGIST GROUP OF INSTITUTIONS	June - July 2021
2020- 24	JOEL SAJI	AUGMENTED REALITY AND VIRTUAL REALITY	RAJADHANI INSTITUTE OF SCIENCE AND TECHNOLOGY	06-02-21
2020- 24	JOLBIN JOSE	APPLICATIONS TOWARDS INDOOR/OUTDOOR LOCALIZATION TECHNIQUES USING RADIO FREQUENCY ENGINEERING	IEEE CIRCUITS AND SYSTEMS (CAS) SOCIETY BANGALORE CHAPTER	6/15/2021
2020- 24	PRESTEE ALPHS	HOW TO PUBLISH IN A GRADE /SCI INDEXED JOURNALS	GSSS INSTITUTE OF ENGINEERING & TECHNOLOGY FOR WOMEN	6/14/2021
		QUIZ ON "ENVIRONMENTAL SCIENCE"	SREE SANKARA VIDYAPEETOM COLLEGE	06-05-21
		ACHIEVING ENERGY EFFICIENCY IN HIGH DATA RATE TRANSMISSION TECHNIQUES FOR 5G SYSTEMS	IETE MYSURU CENTRE	06-03-21
		RECENT DEVELOPMENTS OF ADVANCED ANTENNA PRODUCTS FOR SPACE AND GROUND APPLICATIONS, L4,	L4 LEARN FROM LEADER'S LEARN FROM LEGENDS	5/28/2021

		ENVIRONMENTAL SCIENCE	DEPARTMENT OF PHYSICS AND SCIENCE FORUM	06-05-21
		AN OVERVIEW OF FILM EDITING	SREE SANKARA VIDYAPEETOM COLLEGE	06-03-21
		MACHINE LEARNING FOR WIRELESS COMMUNICATIONS	IEEE INFORMATION THEORY SOCIETY (ITS) BANGALORE CHAPTER	06-08-21
		MACHINE LEARNING FOR WIRELESS COMMUNICATIONS	IEEE INFORMATION THEORY SOCIETY (ITS) BANGLORE CHAPTER	06-08-21
2020- 24	RIYA BIJU	ACHIEVING ENERGY EFFICIENCY IN HIGH DATA RATE TRANSMISSION TECHNIQUES FOR 5G SYSTEMS	THE INSTITUTION OF ELECTRONICS & TELECOMMUNICATION ENGINEERS MYSURU CENTRE	06-03-21
		APPLICATIONS TOWARDS INDOOR/OUTDOOR LOCALIZATION TECHNIQUES USING RADIO FREQUENCY ENGINEERING	IEEE CIRCUITS AND SYSTEMS (CAS) SOCIETY BANGLORE CHAPTER	6/15/2021
		AUGMENTED REALITY AND VIRTUAL REALITY	IEEE SB RIST	06-02-21
		YOUNG INNOVATORS PROGRAM 2020	K-DISC	6/21/2021
		I2P CONTEST	ASIET	06-04-21
2018- 22	CHRISTY K SHILY	YOUNG INNOVATORS PROGRAM 2020	K-DISC	6/21/2021
2018- 22	ASHNA BIJU	NATURE-BASED SOLUTIONS FOR DISASTER AND CLIMATE RESILIENCE	UNEP, PEDRR & EUROPEAN UNION	06-02-21
2018- 22	ATHULYA MATHEWS	NTERNSHIP ON INTRODUCTION TO HTML5	UNIVERSITY OF MICHIGAN	5/26/2021
2018- 22	FARHAN NAJEEB	CAMPUS AMBASSADOR OF MOMENTUM 2K21	ISA ASIET	06-01-21

		CYBERSECURITY FUNDAMENTALS	OPEN P-TECH (IBM LEARNING PARTNERS)	6/21/2021
		CAMPUS AMBASSADOR OF MOMENTUM 2K21	ISA ASIET	06-01-21
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