





Department of Electronics and Communication Engineering

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

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STB16621

A REPORT ON WEBINAR TITLED

"COMPOSITE MATERIALS FOR AUTOMOTIVE

APPLICATIONS & FLEXIBLE ELECTRONICS"

01st JUNE 2021



Organized by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

A NAAC Accredited Institution Recognized under 2(f) & 12(B) of UGC (Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Phone : 04362-282474, 282395 Website : <u>www.kingsindia.net</u>

A Glimpse on the Background of Webinar:

Department of Electronics and Communication Engineering, organized a webinar on *"COMPOSITE MATERIALS FOR AUTOMOTIVE APPLICATIONS & FLEXIBLE ELECTRONICS"* on 01st June 2021, from 11.00 p.m. to 12.00 Noon.

The main objective of this webinar is to provide basic knowledge on the composite material and flexible electronics materials.

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this webinar. Mrs. N.Mangaiyarkarasi, HOD/ECE was the convener of our webinar. Dr.T.Shanthi, Associate Professor /ECE, Mr.R.Thandayuthapani,AP/ECE were the program coordinators.

OVERVIEW OF THE WEBINAR:

ABOUT THE RESOURCE PERSON:

The resource person for the webinar was Mr.A.Senthil Kumar, Project Scientist, Indian Institute of Technology, Chennai.

ABOUT THE IMPORTANT COMMUNICATION LINK'S

- REGISTRATION LINK : https://tinyurl.com/webflexibleelec
- > **YOU TUBE LINK** : https://youtu.be/5pJSrZO50gc
- GOOGLE MEET LINK : https://meet.google.com/wfu-muuy-rdc
- **FEEDBACK LINK** : https://tinyurl.com/fbflexibleElec

ABOUT THE REGISTRATION PROCESS:

The webinar was organized via Google Meet platform and also live streamed in YouTube channel. The registration link was shared to participants through various WhatsApp groups and Gmail. We received responses from various institutions and also from internal participants. Confirmation mail along with YouTube link was sent to all the registered participants of the webinar.

ABOUT THE WEBINAR:

- ✓ The webinar started by 11.00 p.m.
- ✓ Dr.T.Shanthi, Associate Professor /ECE coordinator of the webinar welcomed the resource person and the participants.
- ✓ Mr.R.Thandayuthapani, AP/ECE coordinator of the webinar introduced the resource person.
- ✓ Resource person gave very clear explanation on the "COMPOSITE MATERIALS FOR AUTOMOTIVE APPLICATIONS & FLEXIBLE ELECTRONICS " through the following subtopics:

opics:

- ✤ Moto of the webinar is conversion from waste material to useful one
- Make in India
- Motivate the students for research
- ✤ Composite material for automotive applications.
- Classification of Natural fibers
- Structure and properties of composite materials
- Geometry and Orientation of the fibers in the composite
- Surface modification of Natural fibers
- Drawbacks of Natural fiber composite
- Nano composite
- Flexible Electronics
- Conductive Nanomaterial for Printed Electronics
- Nano material requirements and challenges
- Conductive ink and Pen
- Conductive inject ink is multicomponent system
- ◆ Conductive ink: Join the IoT revolution with innovative and flexible applications
- Circuits demo

✓ Finally he gave tips regarding useful certification and non certification courses and also shared the link. The queries posted in the YouTube chat box by the participants were clarified. Feedback link was posted in the chat box. Mr.R.Thandayuthapani, AP/ECE, proposed vote of thanks. Programme was technically supported by Mr. J. Niranjan Samuel, JRF/R&D.

OUTCOME:

✓ We received 100 registrations from various institutions.



- ✓ All the 75 participants gave the feedback about the webinar via the Feedback Link.
- ✓ The E-Certificate was provided to all the attendees through their E-mail Id.

BROCHURE





Co Ordinator (3) HOD 25/6/2021

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A REPORT

WEBINAR TITLED

ON

"THE ROLE OF INTERNET OF THINGS (IoT) in Current Pandemic of COVID-19"

27th MAY 2021



Organized by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

A NAAC Accredited Institution Recognized under 2(f) & 12(B) of UGC (Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Phone : 04362-282474, 282395 Website : <u>www.kingsindia.net</u>

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A Glimpse on the Background of Webinar:

Department of Electronics and Communication Engineering, organized a webinar on **"THE ROLE OF INTERNET OF THINGS (IOT) IN CURRENT PANDEMIC OF COVID-19**" on 27th May 2021, from 03.00 p.m. to 04.00 p.m.

The main objective of this webinar is to provide basic knowledge on the role of internet of things (IoT) in current pandemic circumstances.

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this webinar. Mrs. N.Mangaiyarkarasi, HOD/ECE was the convener of our webinar. Mr.W.Newton David Raj, AP/ECE, Mr.J.Niranjan Samuel, JRF/R&D were the program coordinators.

OVERVIEW OF THE WEBINAR:

ABOUT THE RESOURCE PERSON:

The resource person for the webinar was Dr.JOE LOUIS PAUL, Associate Professor, Department of Information and Technology, SSN College of Engineering, Chennai.

ABOUT THE IMPORTANT COMMUNICATION LINK'S

- REGISTRATION LINK : https://forms.gle/EV39gymwvsvkjQJK6
- YOU TUBE LINK : https://youtu.be/YcYjGNjH5fl
- GOOGLE MEET LINK :meet.google.com/aee-yqrn-rnb
- FEEDBACK LINK : https://tinyurl.com/FB-RoleofIOT27-5

ABOUT THE REGISTRATION PROCESS:

The webinar was organized via Google Meet platform and also live streamed in YouTube channel. The registration link was shared to participants through various WhatsApp groups and Gmail. We received responses from various institutions and also from internal participants. Confirmation mail along with YouTube link was sent to all the registered participants of the webinar.

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ABOUT THE WEBINAR:

- ✓ The webinar started by 3.00 p.m.
- ✓ Ms.M.Keerthika, Student coordinator, Electronics Club (III ECE) welcomed the resource person and the participants.
- ✓ Mr.W.Newton David Raj, AP/ECE coordinator of the webinar introduced the resource person.
- Resource person gave very clear explanation on the "THE ROLE OF INTERNET OF THINGS (IOT) IN CURRENT PANDEMIC OF COVID-19 " through the following subtopics:
 - COVID-19
 - Transmission of COVID-19
 - Digital Transformation in Health & Social Care.
 - Digital Transformation Roadmap
 - Artificial Intelligence(AI)-Precision Diagnostics
 - Artificial Intelligence(AI)-Drugs Discovery
 - Block chain Technology-Electronics Health Record(EHR)
 - Block chain Technology-Supply Chain
 - IOT in Remote Health Monitoring
 - Contact Tracking Architecture
 - Vaccine Distribution-Global Shipping Infrastructure
 - FSAI's Personal Sanitization Solutions
 - FSAI's Support to Fight COVID-19
 - IOT Perspective
 - IOT & Cloud Based Screening Systems
 - IOT Asset Tracking and Control
 - IOT in Patient Monitoring

Finally he gave tips regarding useful certification and non certification courses and also shared the link. The queries posted in the YouTube chat box by the participants were clarified. Feedback link was posted in the chat box. Finally, Ms.G.Latchayasri, Student Vice President, Electronics Club proposed vote of thanks. Programme was coordinated by Mr. J. Niranjan Samuel, JRF/R&D.

Coordinator

OUTCOME:

- ✓ Paricipants were able to understand building blocks of Internet of Things and characteristics.
- ✓ Webinar provided an overview of Cloud based Screening system, Internet in Mobile Devices & Sensor Networks.
- ✓ Participants also enlighten their mind on Industry 4.0, IIoT smart manufacturing.
- Project skills of the second and third year students were developed through the webinar. They explored to the interconnection and integration of the physical world and the cyber space. The webinar was a eye opener to design & develop projects/products using IoT in drug delivery and IoT Devices.
- ✓ Through the webinar participants gained knowledge on the role of IOT in handling the COVID drug transit and the monitoring the affected patients.
- ✓ The E-Certificate was provided to all the attendees through their E-mail Id.
- ✓ 99 participants participated and gained knowledge.

BROCHURE







Chief Guest Profile

Dr. I. Joe Louis Paul B.E., M.E., Ph.D. Associate Professor

Email: joelouisi@ssn.edu.in Extn: 368

Sri Sivasubramaniya Nadar (SSN) College of Engineering

Rajiv Gandhi Salai (OMR) Kalavakkam – 603 110 Tamil Nadu, India

I. Joe Louis Paul has more than 21 years of teaching experience and 13 years of research experience. He received his B.E (EEE) degree with a first class from Karunya Institute of Technology, Coimbatore, Bharathiar University, M.E. (CSE) degree with a first class with distinction from Mepco Schlenk Engineering College, Sivakasi, Madurai Kamaraj University and Ph.D. degree from Anna University Chennai in the area of error control coding.

Academic Experience

He started his career as a lecturer in the Department of EEE, Alagappa Chettiar Government College of Engineering and Technology, Karaikudi in the year 1998. After earning his masters, he joined as a lecturer in the Department of IT, Mepco Schlenk Engineering College, Sivakasi in the year 2002. Then, he joined SSN College of Engineering in the year 2005 and he is currently working as an Associate Professor in the Department of IT. He has organized/attended many externally/internally funded Conferences /Workshops / Seminars/Guest Lectures at National and International level.

Subjects Taught

He has taught the courses like Computer Architecture, Wireless Communication, Mobile Computing, Mobile Communication, Principles of Compiler Design, Information Theory and Coding, Operating Systems, Information Coding Techniques, Visual Programming, Multimedia Systems, Digital Signal Processing, Object Oriented Programming, Software Engineering and Artificial Intelligence for UG programmes and System Programming and Operating Systems, Wireless Networks and Multimedia Compression Techniques for PG Programme.

Research Interests

His current research areas of interest include Error Control Coding, Wireless Communication and Internet of Things (IoT).



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2020-21 (Even SEM) <u>IEEE STUDENTS BRANCH STB 16621- May, 2021</u> <u>INTERNAL STAFF TECHNICAL SEMINAR</u>

24.05.2021

Department of Electronics and Communication Engineering & IEEE Student Branch STB 16621 jointly organized a Technical Seminar on **"Evaluation of Optical MIMO Transmission through Multicore Fiber Links with an Optical Switch"** on 24.05.2021. Mrs.N.Mangaiyarkarasi, HOD/ECE welcomed the participants. **Mr.R.Balakrishnan**, Assistant Professor/ECE delivered lecture through Google meet platform. In his lecture, he briefed the significance of Multiple-Input and Multiple-Output (MIMO) signal processing technique to eliminate the interference caused by crosstalk along Space Division Multiplexing (SDM) links. Mr. T. Pasupathi, AP/ECE proposed vote of thanks.



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2020-21 (Even SEM) <u>IEEE STUDENTS BRANCH STB 16621- May, 2021</u> INTERNAL STAFF TECHNICAL SEMINAR

10.05.2021

Department of Electronics and Communication Engineering & IEEE Student Branch STB 16621 jointly organized a Technical Seminar on *Applications of Electromagnetics in Biomedical Applications* on 10.05.2021. Mrs.N.Mangaiyarkarasi, HOD/ECE welcomed the participants. **Mr.K.Sudharsanan**, Assistant Professor/ECE delivered lecture through Google meet platform. In his lecture, he briefed significance of Electromagnetics in Biomedical Applications, especially interaction of electromagnetic waves with biological tissues and living systems, the therapeutic, diagnostic, and imaging applications of electromagnetics. Mr. T. Pasupathi, AP/ECE proposed vote of thanks.



Telenter DRC MEMBER

J. Roominon

HOD/ECE



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2020-21(ODD SEM) **IEEE STUDENTS BRANCH STB 16621- March, 2021 INTERNAL STAFF TECHNICAL SEMINAR**

03.03.2021

Department of Electronics and Communication Engineering & IEEE Students Branch STB 16621 jointly organized a Internal Staff Technical Seminar on "Internet of Things Applications for Connected Vehicles and Intelligent Transport Systems" on 02.03.2021. Mrs.N.Mangaiyarkarasi, HOD/ECE welcomed the faculty members. Mr.S.Sivakumar, Assistant Professor /ECE delivered lecture. In his lecture, he briefed the Fundamentals and applications of IoT and Cloud computing. Also he briefed the real time controlling of Vehicles to Vehicles (V2V) and Vehicles to Infrastructure (V2I) through IOT.



DRC MEMBE (T.Pasupathi)

40 22/3/2) HOD/ECE

J. Marun 2021-

PRINCIPAL

Webinar

REPORT

on

Fundamentals of Antenna and It's Design Tools

Held on

27/02/2021

Co-ordinators

Mr.P.Raja Pirian AP/ECE Mr.W.Newton david Raj AP/ECE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING KINGS COLLEGE OF ENGINEERING PUNALKULAM

<u>REPORT</u>

A Webinar on **Fundamentals of Antenna and It's Design Tools** was organized by Department of Electronics and Communication Engineering on 27-02-2021 at 11.00 a.m. to 12.00 noon, to motivate the students to involve in Antenna Domain and also the students to get more ideas on latest tools in smart antenna design.

The program was delivered via Google meet.

Google Meet Link : <u>https://meet.google.com/myk-osjm-wuu</u>

Ms.T.Swetha, PG Student –Wireless Technology, Anna University (MIT Campus), Chennai was the resource person.

The webinar begins at 11.00 a.m, Mr.P.Raja Pirian AP/ECE welcomes the resource person and the gathering, followed by Ms.G.Latchaya Sri, UG Student, introduced the chief guest. Mrs.N.Mangaiyarkarasi, HoD/ECE delivered the inaugural address.

Ms.T.Swetha, briefed the concepts of Antenna, Basic Electromagnetic Theory, Boundary Conditions and Excitations, Computational Electromagnetics, HFSS simulation basics and analysis setup, Reconfigurable Antennas · MIMO Antennas , Metamaterial Design and Analysis.

In her presentation, she demonstrates a simple smart antenna and shows the simulation and the technology of fabrication also. Finally she explains the need for antenna designers towards communication sectors such as Mobile, Satellite and Radar etc.

The students were actively involved in the entire sessions. Finally Mrs.U.Jeyamalar, AP/ECE delivers the vote of thanks.

Total of 114 students were participated in the workshop; 105 students from our college and the remaining participants from other Engineering colleges from Tamilnadu.



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Resource Person Presenting the Webinar

HOD/ECE . 6/4/21



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2020-21(ODD SEM) <u>IEEE STUDENTS BRANCH STB 16621- January, 2021</u> INTERNAL STAFF TECHNICAL SEMINAR

17.02.2021

Department of Electronics and Communication Engineering & IEEE Students Branch STB 16621jointly organized a Internal Staff Technical Seminar on "Researches in Agriculture" on 15.02.2021. Mrs.N.Mangaiyarkarasi, HOD/ECE welcomed the faculty members.. Mr.P.Raja Pirian, Assistant Professor /ECE delivered lecture. In his lecture, he briefed the difficulties faced by the farmers during the farming and explained the real-time applications which include sophisticated technologies such as hydroponics, aeroponics, robots, temperature and moisture sensors, aerial images, GPS technology. He also briefed the recent developments in agricultural/farming.



Mr.P.Raja Pirian, AP/ECE, delivering the lecture.

DRC MEMBI

(T.Pasupathi,AP/ECE)

HOD/ECE 22 3/21

J. Motutur 22/3/2021.

PRINCIPAL





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2020-21(ODD SEM) <u>IEEE STUDENTS BRANCH STB 16621- January, 2021</u> <u>INTERNAL STAFF TECHNICAL SEMINAR</u>

06.02.2021

Department of Electronics and Communication Engineering & IEEE Students Branch STB 16621 jointly organized a Internal Staff Technical Seminar **Research Paper Writing: Preparation to Publication** on 30.01.2021. Mrs.N.Mangaiyarkarasi, HOD/ECE welcomed the faculties. **Mr.T.Pasupathi**, Assistant Professor /ECE delivered lecture. In his lecture, he briefed Significance and impact of Journal/Conference publication in reputed journals, strategies to be followed while writing the manuscript, Writing Manuscript- Do's and Dont's, Selecting a journal for publication, Different Indexing of journals and its significance and Journal citation factors and metrics (Impact Factor, SNIF, h-index, i10 index).



Mr.T.Pasupathi, AP/ECE, delivering the lecture.

DRC MEMBER

HOD/EC

06/2/2021 PRINCIPAL

REPORT

on

Webinar on Amazon Web Services with EC2, EB and S3

Co ordinators

Mr.P.Raja Pirian AP/ECE Mrs.R.Ponni AP/ECE Mr.Niranjan Sauvel JRF/R&D

On

29/06/2020

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

"International webinar on Amazon Web Services with EC2, EB and S3" ECE Dept. and IEEE SB jointly organized its First International webinar on "Amazon Web Services with EC2, EB and S3" on 29th June, 2020 in the presence of Dr. J. Arputha Vijaya Selvi, Principal, Kings College of Engineering , Mrs. N. Mangaiyarkarasi, HOD/ECE. Dr. V. Bala Dhandayuthapani, Professor in Information Technology, Shinas Institute of Technology, Oman delivered the lecture. In his lecture, he briefed on Cloud Computing, AWS Global Cloud infrastructure, Creating an account in AWS, Elastic Compute Cloud, Simple Storage Service and Elastic Bean Stack with live demonstrations. Speaker clarified the queries raised by the participants. Mr. P. Raja Pirian, AP/ECE, delivered the vote of thanks. Mr. J. Niranjan Samuel, JRF/ECE-R&D, moderated the session. 327 members from various institutions at India, Denmark, Indonesia, Oman and Singapore participated in this programme.





Coordinator (3)

HOD/ECE

2

J. 2/2/2020

REPORT

Webinar on FSOC: Design Challenges

Jointly organized by Department of Electronics and Communication Engineering

On

19th JUNE 2020 | 11 :00 to 12:00 PM

@

Google Meet

Prepared By

A.Herald AP/ECE







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report:

Department of Electronics and Communication Engineering and R&D Section, has jointly organized a webinar on "FSOC:Design Challenges "on 19th June 11.00 to 12.00 PM @ Google Meet. Dr.K.Prabu, National Institute of Technology, Suratkal, Karnataka, was the resource person.

The main objective of the webinar was to disseminate the knowledge in the field of Free Space optical Communication (FSOC).

The webinar started by 11.00 a.m. as per the schedule with the registered participants from reputed institutions. Mr.J.Niranjen Samuvel JRF/ECE, welcomed the participants and Mr.S.Ramarajan, AP/ECE introduced the chief guest. The session began with talk about **"FSOC:Design Challenges"** by Dr.K.Prabu. In his lecture, he covered the Importance, history, applications and Recent Trends of FSOC and also discuss the Challenges and Research avenues of FSOC. All the participants were actively participated in the session. Participants interacted with the resource person using the chat window effectively to clear their queries and learn the concepts. The session ended at 12.30 p.m. with feedback. The entire programme was scheduled and coordinated by Mr.A.Herald, AP/ECE, Mr.S.Ramarajan, AP/ECE and Mr.J.Niranjan Samuel, JRF.



Webinar Presentation by Dr.K.Prabu, NIT-Suratkal,Karnataka.

Pre Process

The webinar process began on 12/06/2020. Poster and registration form links were circulated through WhatsApp and e-mail. Nearly 187 members from various Intuitions registered for the webinar. Invitations and reminder were sent to all the registered participants.



Prabu K

Assistant Professor Department of Electronics and Communication Engineering National Institute of Technology Karnataka - Surathkal P.O. Srinivasnagar, Mangalore – 575025, Karnataka, INDIA E-mail: prabuk [at] nitk [dot] edu [dot] in nitprabu [at] gmail [dot] com

Professional Experience: Total: 8 years

Academic Background

Ph.D.: National Institute of Technology (NIT), Tiruchirappalli, April 2015, M.E: Madras Institute of Technology (MIT), Anna University, 2010, B.E: Anna University, Chennai, 2007.

Areas of Interest

- Wireless Optical Communication (FSO, VLC, Underwater)
- Optical Communication
- Wireless Communication
- Optical Sensors
- Nano-Photonics
- Photonic Crystal Fibers
- 5G
- Antennas
- IoT
- AI Enabled Wireless Communication

Significant Projects

 Project Title: Performance Analysis and Enhancement of Radio over Free Space Optical Communication System for 5G Applications for Smart Cities Role : Principal Investigator Duration : 2019 - 2021 Funding Agency : SERB - DST, Govt of India Total Budget : Rs. 28,06,000/-

Supervision of Ph.D

- 1. N Vijaya Ratnam
- 2. Bhargav Kumar
- 3. Santhosh A Janawade
- 4. Abhishek Kumar

Number of Publications

International Journals:50

Books

1. **"Microwave Engineering Theory and Techniques" – David M Pozar, Wiley,** WILEY India Adaptation, Content contribution for Indian Adaptation by Prabu K, Santosh A. Janawade.



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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai Punalkulam, Gandarvakottai Taluk, Pudukkottai District - 613 303.

A REPORT

ON LIVE ONLINE WEBINAR TITLED

"ANTENNAS FOR HEALTH CARE APPLICATION"

10th JUNE 2020



Organized by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

A NAAC Accredited Institution Recognized under 2(f) & 12(B) of UGC (Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Phone: 04362-282474, 282395 Website : www.kingsindia.net

A Glimpse on the Background of Webinar:

In Kings College of Engineering,Department of Electronics and Communication Engineering, has organized a online Webinar titled "**ANTENNAS FOR HEALTH CARE APPLICATION**" on 10th June 2020, from 11.30 a.m to 12.30 p.m.

The main objective of this Webinar is to utilize the lockdown period by providing the basic knowledge about the antennas for health care application.

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this Webinar. Mrs. N.Mangaiyarkarasi, HOD/ECE was the convener of our webinar. Mr.W.Newton David Raj, AP/ECE, Mr.T.Jeyaseelan,AP/ECE & Mr.J.Niranjan Samuel,JRF/ECE-R&D were the program coordinators.

OVERVIEW OF THE WEBINAR:

ABOUT THE RESOURCE PERSON:

The resource person for the webinar was Dr.T.Anita Jones.,M.E.,Ph.D,Assistant Professor, Department of Electronics and Communication Engineering, Karunya Institute of Technology and Sciences, Coimbatore.

ABOUT THE REGISTRATION PROCESS:

The webinar was planned to conduct via Google Meet platform. The registration link was created through Google forms and the link was posted in various WhatsApp groups.

Registration Link:

https://forms.gle/qahuNXRQUmdDGM879

We have received 150 responses from various institutions. Before one day of the Webinar, we have stopped receiving the registration response. For all the registered participants we gave the confirmation mail for our Webinar participation.

On that day of the program, the webinar google meet link was given to all the registered participants 1 hour before the commencement of the program through their E-Mail Id.

ABOUT THE WEBINAR:

- ✓ The webinar was started at 11.30 a.m with 102 participants.
- ✓ Mrs.P.Thirumagal,AP/ECE welcomed the resource person and the participants by the words, and also introduced the Resource person. Then the session was handed over to the Resource person.
- Resource person gave very clear explanation about the Title of the "Antennas for Health Care Applications" through the following sub-topics:
 - Body-Worn Antennas and External Antennas
 - PIFA IN CAD FEKO
 - Microstrip Patch Antenna Calculator
 - Meander Line PIFA Antenna
 - Wearable Antenna on body
 - Implantable Antenna
 - Spiral Patch Structure
 - Research Challenges.
 - Specific Absorption Rate(SAR)
 - ✤ Heterogeneous and Homogenous Brain Model for Tumor Detection
 - ✤ Biocompatible
 - Capsule Endoscopy Phantom
 - Health Issues
- ✓ Finally she gave some real time demo by using the feko and also given the software student edition link to the interested participants.
- ✓ At 12.30 p.m she comes to the end of the session. The queries were asked by the participants for 15 minutes..She gave the answers for all the queries. At 12.30 p.m one of this webinar coordinator Mr.J.Niranjan Samuel ,JRF/ECE-R&D have posted the Feedback link Via the chat box.
- ✓ Finally, coordinator Mr.W.Newton David Raj,AP/ECE of this webinar gave the vote of thanks with words. Thus the program ended successfully.

OUTCOME:

- ✓ We received 150 registration from 80 various Institutions.
- ✓ Among the 150 registered participants 102 have attended the session.
- ✓ All the 102 participants gave the feedback about the webinar via the Feedback Link.

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STB16621

A REPORT

ON LIVE ONLINE WEBINAR TITLED

"MODERN ANTENNA DESIGN CHALLENGES"

06th JUNE 2020



Organized by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

A NAAC Accredited Institution

Recognized under 2(f) & 12(B) of UGC

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Phone: 04362-282474, 282395

Website : <u>www.kingsindia.net</u>

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A Glimpse on the Background of Webinar:

In Kings College of Engineering,Department of Electronics and Communication Engineering, has organized a online Webinar titled "**MODERN ANTENNA DESIGN CHALLENGES**" on 06th June 2020, from 11.00 a.m to 12.00 p.m.

The main objective of this Webinar is to utilize the lockdown period by providing the basic knowledge about the modern antenna design challenges.

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this Webinar. Mrs. N.Mangaiyarkarasi, HOD/ECE was the convener of our webinar. Mr.W.Newton David Raj, AP/ECE, Mrs.P.Thirumagal, AP/ECE were the program coordinators.

OVERVIEW OF THE WEBINAR:

ABOUT THE RESOURCE PERSON:

The resource person for the webinar was Dr.D.Sugumar,M.E.,Ph.D,Assistant Professor, Department of Electronics and Communication Engineering, Karunya Institute of Technology and Sciences, Coimbatore.

ABOUT THE REGISTRATION PROCESS:

The webinar was planned to conduct via Google Meet platform. The registration link was created through Google forms and the link was posted in various WhatsApp groups.

Registration Link:

https://forms.gle/z9iGBvyVY3nFDJDf8

We have received 300 responses from various institutions. Before one day of the Webinar, we have stopped receiving the registration response. For all the registered participants we gave the confirmation mail for our Webinar participation.

On that day of the program, the webinar google meet link was given to all the registered participants 1 hour before the commencement of the program through their E-Mail Id.
ABOUT THE WEBINAR:

- ✓ The webinar was started at 11.00 a.m with 141 participants.
- Mr.W.Newton David Raj, AP/ECE coordinator of this webinar welcomed the resource person and the participants by the words, and also introduced the Resource person. Then the session was handed over to the Resource person.
- Resource person gave very clear explanation about the Title of the "Modern Antenna Design Challenges" through the following sub-topics:
 - Design of Antennas upto 6 GHz and above 6 GHz
 - Applications
 - What is Modern?
 - ✤ 5G Antennas?
 - Antenna Design and Placement
 - Special Applications
 - How to design the antenna?
 - General Antenna Design Process & Challenges.
 - Requirements and Specifications-1 and 2
 - Substrate Materials Availability
 - Solver
 - Solver Requirement
 - Full Wave Methods(Rigorous Methods)
 - Asymptotic Methods(High-Frequency Approximation)
 - MTL(Multiconductor Transmission Line)
 - System Requirement
 - Half-wave Wire Dipole Example
 - Consultancy on Antenna
- ✓ Finally he gave some real time demo by using the feko and also given the software student edition link to the interested participants.
- ✓ At 12.15 p.m he comes to the end of the session. The queries were asked by the participants for 15 minutes..He gave the answers for all the queries. At 12.30 p.m we have posted the Feedback link Via the chat box.

Feedback Link:

✓ Finally, Mrs.P.Thirumagal,AP/ECE coordinator of this webinar gave the vote of thanks with words. Thus the program ended successfully.

OUTCOME:

- ✓ We received 300 registration from 119 various Institutions.
- ✓ Among the 300 registered participants 142 have attended the session.
- ✓ All the 142 participants gave the feedback about the webinar via the Feedback Link.
- ✓ The E-Certificate was provided to all the attendees through their E-mail Id.

BROCHURE





A REPORT

ON

LIVE ONLINE WEBINAR TITLED

"AGILE METHODOLOGY".

01st JUNE 2020



Organized by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

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Phone : 04362-282474, 282395 Website : www.kingsindia.net

A Glimpse on the Background of Webinar:

In KCE, Department of Electronics and Communication Engineering, has organized a online Webinar titled "AGILE METHODOLOGY" on 01st June 2020 from 11.00 a.m to 12.00 p.m.

The main objective of this Webinar is to utilize the lockdown period by providing the basic knowledge about the Agile Methodology.

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this Webinar. Mrs. N.Mangaiyarkarasi, HOD/ECE was the convener of our webinar. Mrs.R.Ponni, AP/ECE, Mr.R.Sathyaraj, AP/ECE & Mrs.D.Vennila, AP/ECE were the program coordinators.

OVERVIEW OF THE WEBINAR: ABOUT THE RESOURCE PERSON:

The resource person for the webinar was Mr.S.Srinath, Technical Lead, Tata Consultancy Services, Chennai.

ABOUT THE REGISTRATION PROCESS:

The webinar was planned to conduct via Google meet platform. The registration link was created through Google forms and the link was posted in various Whats app groups.

Registration Link: <u>https://tinyurl.com/KCEAgile</u>.

We have received 260 responses from various institutions. Before one day of the Webinar, we have stopped receiving the registration response. For all the registered participants we gave the confirmation mail for our Webinar participation. Then the registered participant were asked to join in our Whats App group named " KINGS WEBINAR ON AGILE METHODOLOGY". On that day of the program, the webinar Google meet link was given to all the registered participants 1 hour before the commencement of the program through their E-Mail Id and also through the Whats App group.

ABOUT THE WEBINAR:

The webinar was started at 11.00 a.m with 204 participants. Mrs. D.Vennila, AP/ECE coordinator of this webinar welcomed the resource person and the participants by the words and she gave

the Introduction about the Resource person. Then the session was handed over to the Resource person. He gave very clear explanation about the title of the Webinar.

AGILE methodology is a practice that promotes continuous iteration of development and testing throughout the software development lifecycle of the project. Both development and testing activities are concurrent unlike the Waterfall model.

Finally he gave some real time examples of Agile methodology.

At 11.55 she comes to the end of the session. The queries were asked by the participants for 10 minutes. He gave the answers for all the queries. At 12.10 p.m we have posted the Feedback link Via the chat box.

Feedback Link: <u>https://forms.gle/NccfwsNkFoZdYkpH6</u>

Finally, Mr. R.Sathyaraj, AP/ECE coordinator of this webinar gave the vote of thanks with a word. Thus the program ended successfully.

OUTCOME:

We received 260 registrations from 138 various Institutions.

Among the 260 registered participants 204 have attended the session.

All the 204 participants gave the feedback about the webinar via the Feedback Link.

The E-Certificate was provided to all the attendees through their E-mail Id.

<u>Annexure: I</u>

BROCHURE



Chief Guest Profile

Srinath S,

Technical Lead at TCS

About

An IT Executive with responsibility and proven track record in Industry. Seasoned professional in Business Analysis, Quality Assurance and Program management with 7+ years of experience. Majorly worked on transformation projects and proved good track record in quick turnaround of critical projects, increasing productivity, quality and customer satisfaction. Result driven professional and expertise in global delivery model handling teams across offshore and onshore locations. An effective leader skilled in Planning, Estimation, Scheduling, Resource Management, Executing & Controlling and Escalation. Decisive, energetic, focused team leader leading high performing teams and consistently demonstrates leadership and relationship management skills. Expertise in Global Delivery model handling teams across UK and India. Rich experience in Testing Strategy and Portfolio management and good knowledge in Insurance & banking Domains

- Building and managing relationship with business and client executives.
- Extensive testing experience in Core banking, Debit cards and ATM.ISTQB certificated tester.
- Hands on experince with many banking products like Profile,Base24,Conex,Base2000 and simulator(Versa, Brdige test tool, Lexicel)
- Experienced in test automation with Mainframe applications using QTP, Selenium & Cucumber.
- Extensive work experience on Regression Testing, Functional testing, System Testing and User Interface Testing.
- Project and Program Management.
- QA and Process Improvements.

Key Skills: Test Lead, Mainframe Testing, Functional testing, Test Automation(Selenium ,QTP,Cucumber) Test Optimization, SOAP UI tool, Requirement Analysis, Test Planning & Estimations, Test case writing, Defect management, Reporting and RCA.

Experience

Technical Lead

Tata Consultancy Services

Apr 2017 - Present4 years 10 months Chennai, Tamil Nadu, India

- Building and managing relationship with business and client executives.
- Extensive Domain experience in Core banking, Debit cards and ATM.

• Hands on experience with many banking products like Profile,Base24,Conex,Base2000 and simulator(Versa, Brdige test tool, Lexicel)

• Experienced in test automation like selenium webdriver and appium.

• Extensive work experience on Regression Testing, Functional testing, System Testing and User Interface...



STB16621

A REPORT

ON LIVE ONLINE WEBINAR TITLED

"OVERVIEW OF MACHINE LEARNING, DEEP LEARNING AND NATURAL LANGUAGE PROCESSING USING PYTHON".

27th May 2020



Organized by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

A NAAC Accredited Institution Recognized under 2(f) & 12(B) of UGC (Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai) Phone : 04362-282474, 282395 Website : <u>www.kingsindia.net</u>

A Glimpse on the Background of Webinar:

In KCE, Department of Electronics and Communication Engineering, has organized a online Webinar titled "OVERVIEW OF MACHINE LEARNING, DEEP LEARNING AND NATURAL LANGUAGE PROCESSING USING PYTHON" on 27th May 2020 from 2.00p.m to 3.00 p.m.

The main objective of this Webinar is to utilize the lockdown period by providing the basic knowledge about the machine learning, Deep learning and NLP Algorithm using Python.

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this Webinar. Mrs. N.Mangaiyarkarasi, HOD/ECE was the convener of our webinar. Mrs.R.Ponni, AP/ECE, Mr.R.Sathyaraj, AP/ECE & Mrs.D.Vennila, AP/ECE were the program coordinators.

OVERVIEW OF THE WEBINAR: ABOUT THE RESOURCE PERSON:

The resource person for the webinar was Dr.P.Manimegalai, M.E.,Ph.D, Associate Professor, Department of Biomedical Engineering, Karunya Institute of Technology and Sciences, Coimbatore.

ABOUT THE REGISTRATION PROCESS:

The webinar was planned to conduct via Cisco Webex meet platform. The registration link was created through Google forms and the link was posted in various Whats app groups.

Registration Link: <u>https://forms.gle/c2ZwvuoY8jWp18PcA</u>.

We have received 458 responses from various institutions. Before one day of the Webinar, we have stopped receiving the registration response. For all the registered participants we gave the confirmation mail for our Webinar participation. Then the registered participant were asked to join in our Whats App group named " KINGS ECE WEBINAR". On that day of the program, the webinar webex link was given to all the registered participants 1 hour before the commencement of the program through their E-Mail Id and also through the Whats App group.

ABOUT THE WEBINAR:

The webinar was started at 2.00 p.m with 312 participants. Mrs. D.Vennila, AP/ECE coordinator of this webinar welcomed the resource person and the participants by the words and she gave

the Introduction about the Resource person. Then the session was handed over to the Resource person. She gave very clear explanation about the Title of the Webinar Machine learning, Deep Learning and NLP.

The purpose of machine learning is to discover patterns in your data and then make predictions based on often complex patterns to answer business questions, detect and analyze trends and help solve problems.

The purpose of Deep Learning is to improve the performance of a Deep Learning model the goal is to the reduce the optimization function which could be divided based on the classification and the regression problems.

The purpose of NLP is to analyze textual data in Python through the concepts of Natural Language Processing (NLP).

Finally she gave some real time examples by using the python codings.

At 3.15 she comes to the end of the session. The queries were asked by the participants for 10 minutes. She gave the answers for all the queries. At 3.30 p.m we have posted the Feedback link Via the chat box.

Feedback Link: <u>https://forms.gle/7bUyKdfpoqipa1Ys5</u>

Finally, Mrs. R.Ponni, AP/ECE coordinator of this webinar gave the vote of thanks with a words. Thus the program ended successfully.

OUTCOME:

We received 458 registration from 296 various Institutions.

Among the 458 registered participants 312 have attended the session.

All the 312 participants gave the feedback about the webinar via the Feedback Link.

The E-Certificate was provided to all the attendees through their E-mail Id.

<u>Annexure: I</u>

BROCHURE



Registration link https://forms.glc/c2ZwvuoY8jWp18PcA

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RESEARCH INTERESTS

Biosignal Processing, Medical Device Design, Image Processing, AI in healthcare

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EXPERIENCE

20 Years

RESEARCH PROFILES

1	Google Scholar Profile	https://scholar.google.com/citations?user=5GdT5OYAAAAJ&hl=en
2	Scopus Profile	https://www.scopus.com/authid/detail.uri?authorId=38362113600

PATENTS

2009 - 2021

¹ UV Object Sanitizer published by Feb 2021

RESEARCH PROJECTS

#		Titt	le of the project		Fund	ling Agency	Amount (Re	5.)	Year	
1	Low Cos	st CPAP Machine		Harva	ard University	20000		2021		
SUN	IMARY O	F INTERNATIO	NAL JOURNAL	& CONFEREM	NCE PUE	BLICAT	TIONS - [PUB	LISHED & A	CCEI	PTED]
	Year	International Journal Publications	International Conference Publications	National Conference	Cumul Impa Fact	ative act	Scopus Citations	Google Scholar Citations	h-i	index

3.1

5

198

358

q

EDITORIAL BOARD MEMBER:

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EDUCATI	ION				
Degree	Branch / Specialization	University	Class	Mode	Month &Year of Passing
Ph.D.,	Information and Communication/Biosign al Processing	Anna University,Chennai		Parttime	June 2013
M.E.,	Applied Electronics	Anna University,Chennai	I class	Parttime	June 2008
B.E.,	Biomedical Instrumentation	Avinashilingam University	I Class	Fulltime	May 2000

TEACHING INTERESTS

Diagnostic and Therapeutic Devices, Human Anatomy and Physiology ,Biomedical Medical Image Processing, Mchine learning, Deep Learning

RESEARCH GUIDANCE

Research guidance as supervisor	Completed	Ongoing
Doctor of Philosophy - PhD Thesis advising	10	5
Master of Engineering - Master's Thesis advising	15	2







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR (2020 -2021) ODD SEM

REPORT

ON

INTERNAL STAFF SEMINAR

(BLOOMS TAXONOMY)

(02-12-2020)









DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR 2020 -2021 (ODD SEM)

04-12-2020

REPORT ON INTERNAL STAFF SEMINAR on BLOOMS TAXONOMY

In KCE, department of Electronics and Communication Engineering, has organized an internal staff seminar on "Blooms Taxonomy" for ECE faculty members on 02-12-2020 (Wednesday) in DSP lab between 10.30 a.m to 11.30 a.m.

Totally 14 staff members have enthusiastically attended the session.

The seminar mainly focuses on the various levels of Blooms Taxonomy such as Remembering, understanding, Applying, Analyzing, Evaluating and Creating and how to take question paper based on this Blooms Taxonomy.

Mrs.D.Vennila, IQAC member of ECE, explained clearly about the Question paper setting for Continuous Assessment Test and Model Exam based on the Bloom's Taxonomy for both theory paper and problematic papers.

For a sample, one theory question paper and one problematic question paper was explained.

OR0551- Renewable Energy Sources – Theory paper.

CS 8351 – Digital Principles and System Design – Problematic Paper.

Discussions were also carried out with all the staff members for these question papers.

The clarifications regarding the questions under creative level and evaluating level, BT words were also rectified.



Mrs. D.Vennila, AP/ ECE handling the session on Blooms Taxonomy

Finally we all had an idea to set the question papers according to Blooms Taxonomy.







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR (2020 -2021) ODD SEM

REPORT

ON

CO-PO-PSO-PEO MAPPING AND IMPLEMENTATION





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR 2020 -2021 (ODD SEM)

18-12-2020

REPORT ON CO-PO-PSO-PEO MAPPING AND IMPLEMENTATION

In order to strengthen the efforts towards outcome based education, Department level meeting with all the staff members was organized on 16-11-2020 (Monday) between 11.00 a.m to 12.30 p.m at HOD cabin.

Totally 16 staff members attended the session.

Mrs.N.Mangaiyarkarasi, HOD/ECE, discussed the following points during the meet.

In OBE implementation, the first step is to identify, analyze and to confirm the

following formats for every regulation. (One time initiative).

- 1. Program Outcome Competencies Performance Indicators
- 2. Course Articulation Matrix
- 3. Program Articulation Matrix
- 4. PO-PEO-PSO attainment analysis (for every batch)

In addition to that, the course attainment analysis, PO mapping & Assessment pattern attainment process were revised by including the following in the course plan.

- 1. Course Assessment Plan (CAP)
- 2. Course Outcome Alignment Matrix (COAM)
- 3. Assessment Paper Quality Matrix (APQM)

Department IQAC member Mrs.D.Vennila, AP/ECE, gave the overview about the CO-PO-PSO-PEO mapping for a course. Department NAAC tack force member Mr.P.Rajapirian, AP/ECE detailed about CAP,COAM and APQM.



Finally, HOD insisted all the staff members to derive the CO-PO mapping for the subjects they have handled during the 2020-2021 odd semester.

The derived CO-PO mapping and implementation was discussed in the department level meeting with all the staff members on 18-11-2020 (Wednesday) between 02.00 p.m to 03.30 p.m at DSP Lab. Totally 16 staff members attended the session.

Department IQAC member, gave the presentation on CO-PO-PSO-PEO mapping for the subject **CS8351- Digital Principles and System Design.**



Mrs. D.Vennila, AP/ ECE presenting on CO-PO-PSO-PEO mapping

There are 12 Program Outcomes (POs) and 3 Program Specific Objectives (PSOs) and 3 Program Educational Objectives (PEOs) in the subject.

The course outcome is mapped with performance indicators and then with program outcomes. Then the CO is mapped with PSOs. Finally the **Course Articulation Matrix** is derived.

S.NO	Course Outcome (CO)	Performance Indicators (PI)	POs	PSOs
CO:1	Simplify Boolean functions	1.2.1, 1.3.1, 1.4.1,	1,2,3,4	1
	using K-Map	2.1.2, 2.1.3, 2.2.4, 2.4.1, 2.4.4,		
		3.1.6, 3.2.3,		
		4.1.1,4.2.1		
CO:2	Design and Analyze	1.3.1, 1.4.1,	1,2,3,4	1
	Combinational and	2.1.1, 2.1.2, 2.2.3, 2.4.1, 2.4.2, 2.4.3,		
	Sequential Circuits	2.4.4,		
		3.1.6, 3.2.2, 3.2.3,		
		4.1.1,4.1.2, 4.3.1,4.3.3		
CO:3	Implement designs using	1.3.1, 1.4.1,	1,2,3,4	1
	Programmable Logic Devices	2.1.1, 2.1.2, 2.1.3, 2.4.1, 2.4.2, 2.4.4,		
		3.1.6, 3.2.2,		
		4.1.1, 4.1.2, 4.3.1, 4.3.3, 4.3.4		
CO:4	Write HDL code for	1.3.1, 1.4.1,	1,3,4,5	1,3
	combinational and	3.2.1, 3.3.1,		
	Sequential Circuits	4.1.2, 4.1.3,		
		5.1.1, 5.2.2, 5.3.2		

CS8351-Digital Principles and System Design

S.NO	Course Outcome (CO)		P0-1		PO-2		PO-3		PO-4		4	PO-5)		
			MPI	MG	TPI	MPI	MG	TPI	MPI	MG	TPI	MPI	MG	TPI	MPI	MG
CO:1	Simplify Boolean functions using K- Map	5	3	0.6	13	5	0.38	13	2	0.15	10	2	0.20	6	-	-
CO:2	Design and Analyze Combinational and Sequential Circuits	5	2	0.4	13	7	0.53	13	3	0.23	10	4	0.50	6	-	-
CO:3	Implement designs using Programmable Logic Devices	5	2	0.4	13	6	0.46	13	2	0.15	10	5	0.50	6	-	-
CO:4	Write HDL code for combinational and Sequential Circuits	5	2	0.4	13	-	-	13	2	0.15	10	2	0.20	6	3	0.5

PO -6 to PO -12 = Not applicable to the subject.

Mapping Grade = Mapped Performance Indicators / Total Performance Indicators. **Threshold level:**

➢ 0 to 33 = 1; 34 to 66=2; 67 to 100 = 3

					<u>CO -P</u>	O MAP	<u>PING</u>					
	PROGRAM OUTCOMEs - (Pos)											
COs	P0-	P0-	P0-	PO-	PO-	P0-	PO-	P0-	P0-	PO -	P0-	P0-
	1	2	3	4	5	6	7	8	9	10	11	12
CO:1	2	2	1	1	-	-	-	-	-	-	-	-
CO:2	1	2	1	2	-	-	-	-	-	-	-	-
CO:3	1	2	1	2	-	-	-	-	-	-	-	-
CO:4	1	-	1	1	2	-	-	-	-	-	-	-
Average	1.25	1.5	1	1.5	0.5	-	-	-	-	-	-	-

Contribution: 1: Reasonable

2: Significant 3: Strong

	<u>CO-PSO MA</u>	PPING		
S.NO	Course Outcomes (COs)	Program S	pecific Outcom	es (PSOs)
		PSO-1	PSO-2	PSO-3
CO:1	Simplify Boolean functions using K-Map	2	-	-
CO:2	Design and Analyze Combinational and Sequential Circuits	2	-	-
CO:3	Implement designs using Programmable Logic Devices	2	-	-
CO:4	Write HDL code for combinational and Sequential Circuits	1	-	2
	Average:	1.75	-	0.5
Contribut	tion: 1: Slight (Low) 2: Moderate (Med	lium) 3: Subst	antial (High)	-: None

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2. COURSE ARTICULATION MATRIX:

COs				PR	OGRAM	1 OUT(COMEs	- (POs	5)				PSOs		
	РО- 1	РО- 2	РО- 3	PO- 4	РО- 5	PO- 6	РО- 7	РО- 8	РО- 9	PO- 10	РО- 11	PO- 12	PSO- 1	PSO- 2	PSO- 3
CO:1	2	2	1	1	-	-	-	-	-	-	-	-	2	-	-
CO:2	1	2	1	2	-	-	-	-	-	-	-	-	2	-	-
CO:3	1	2	1	2	-	-	-	-	-	-	-	-	2	-	-
CO:4	1	-	1	1	2	-	-	-	-	-	-	-	1	-	2
Average	1.25	1.5	1	1.5	0.5	-	-	-	-	-	-	-	1.75	-	0.5



Mapping of CO with Performance Indicators.

COURSE LEVEL (COURSE IN-CHARGES)

Course Assessment Plan (CAP)

Course Name	Digital Principles and System Design
Course Code	CS 8351
Session of Course	60 Periods
LTPC	4 0 0 4
Semester	III
Batch	2019-2023
Faculty Name	Mrs.D.Vennila

Grading Scale	Level of Attainment
Score < 50 %	1
50% to < 70%	2
>= 70%	3

CO	CO Description	Weightage	CAT1	CAT2	MODEL	Assign1.	PCE	AU
C01	Simplify Boolean functions using K-Map	35%	~	~	~	~	✓	
CO2	Design and Analyze Combinational and Sequential Circuits	40%	√	~	~	~	✓	
CO3	Implement designs using Programmable Logic Devices	15%			~			
CO4	Write HDL code for combinational and Sequential Circuits	10%		~	~			

Target : 75 % of students to score > 65 % of marks - CO attainment.

Course Outcome Alignment Matrix (COAM)

COAM is mapping of Assessment questions with BT level (BL) and performance indicator (PI).

Continuous Assessment Test -1:

Q.No.	Question	Marks	CO	BL	PI
1	Convert (475.25)8 to its binary equivalent.	2	CO-1	L-2	1.3.1
2	Convert (101101.1101)2 to decimal and hexadecimal form.	2	CO-1	L-2	1.3.1
3	Define the principle of duality.	2	CO-1	L-1	1.3.1
4	Simplify the following Boolean function to a minimum number of Literals. w'y (w'xz)' + w'xy'z' + wx'y	2	CO-1	L-4	2.1.3
5	State and Prove De Morgan's theorem.	2	CO-1	L-1	1.2.1
6	Show the function Y=AB+B'C +AC in canonical SOP form.	2	CO-1	L-1	2.1.3
7	Show the function Y=A+B'C in canonical POS.	2	CO-1	L-1	2.1.3
8	What is multiplexer? Show the block diagram of 4 : 1 multiplexer.	2	CO-2	L-1	1.3.1
9	Distinguish decoder and demultiplexer.	2	CO-2	L-4	2.2.4
10	Design a combinational circuit with 3 inputs and 1 output. The output is 1 when the binary value of the input is less than 3. The output is 0 otherwise.	2	CO-2	L-6	2.1.2
11.a. (i)	Minimize the following logic function using K-map and draw the logic diagram. F(A,B, C, D) = $\sum m (1, 3, 5, 8, 9, 11, 15) + d(2, 13)$.	7	CO-1	L-4	2.1.2
11.a. (ii)	Simplify the expression $Y(A,B,C) = \pi M(0,2,4,5,6)$, Using only NOR-NOR logic.	6	CO-1	L-4	2.2.3
11.b. (i)	Convert (23.625)10 to octal and Hexadecimal.	2	CO-1	L-2	1.4.1
11.b. (ii)	Convert (1010111011101100)2 into its octal and hexadecimal equivalent.	3	CO-1	L-2	1.4.1
11.b. (iii)	Convert (1001010.1101001)2 to base 16 and (231.07)8 to base 10.	4	CO-1	L-2	1.4.1
11.b. (iv)	Convert the given binary number to octal number. (11010101010)	2	CO-1	L-2	1.4.1

11.b. (v)	Convert the given octal number to hexadecimal number. (3456.75)	2	CO-1	L-2	1.4.1
12.a. (i)	Convert the following function into Product of Maxterms. F(A,B,C,D)=(A+B'+C) (B+C+D) (A+B+D)	6	CO-1	L-2	2.1.3
12.a. (ii)	Convert the following function into Product of Minterms. F(A,B,C)=(AB')+(BC)+ (AC)	7	CO-1	L-2	2.1.3
12.b. (i)	Simplify the following expression using K-map method. $F(A,B,C,D) = \Sigma m(0,2,3,5,7,8,9,10,11,13,15).$	6	CO-1	L-4	2.1.3
12.b. (ii)	Simplify the following expression using K-map method. $F(A,B,C,D) = \Sigma m (0,2,4,6,8,10,13,15) + \Sigma d(1,3,7)$	7	CO-1	L-4	2.1.3
13.a.(i)	Define and design a half subtractor circuit using basic gate.	6	CO-2	L-1	3.1.6
13.a(ii)	Define and design Full Subtractor using logic gates.	7	CO-2	L-1	3.1.6
13.b	What is a combinational circuit? Design a combinational circuit with three inputs, x,y and z, and the three outputs, A, B and c. When the binary input is 0,1,2 or 3, the binary output is one greater than the input. When the binary input is 4, 5,6, or 7, the binary output is one less than the input.	13	CO-2	L-1	4.1.2
14.a.	Design and explain the 2 bit Magnitude comparator with a neat logic diagram.	13	CO-2	L-5	2.2.3
14.b	Minimize the following logic function using K-maps and realize using NAND and NOR gates. F(A,B, C, D) = $\sum m (1, 2, 3, 5, 8, 9, 10, 11, 14, 15).$	13	CO-1	L-6	2.2.3
15.a.(i)	Implement the following Boolean function using only one 4:1 Multiplexer. $F(A,B,C,D) = \sum m(1, 2, 3, 6, 7, 8, 11, 12, 14)$	7	CO-2	L-3	4.1.2
15.a.(ii)	Choose a suitable Multiplexer to implement the following Boolean function. F(A,B,C,D) = A B' D + A'C' D + B' C D' + A C' D	6	CO-2	L-3	2.4.1
15.b(i)	Build the circuit for 3 to 8 decoder and explain.	7	CO-2	L-5	3.2.2
15.b(ii)	Explain in detail about the serial adder and serial	6	CO-1	L-5	2.4.2
16.a	Make use of the necessary diagram and explain the Hamming code with an example.	15	CO-2	L-3	3.2.2
16.b	Design and construct the half adder and full adder circuit using necessary logic gates.	15	CO-2	L-6	3.1.6

Assessment Paper Quality Matrix (APQM)

PART	Level-1	Level-2	Level-3	Level-4	Level-5	Level-6
A	3,5,6,7,8	1,2		4,9		10
В	13(a),13(b)	11(b),12(a)	15(a)	11(a),12(b),	14(a),15(b)	14(b)
С			16(a)			16(b)
TOTAL	17 %	17 %	17 %	17 %	17 %	15 %
Distribution	34	-%	3	4%	32	%

The Review meeting with Principal, Vice Principal, IQAC Coordinator and all the staff members was organized on 20-11-2020 (Friday) between 01.30 p.m to 04.30 p.m at Pallava Hall.

All the 17 staff members attended the review meeting.

Mrs.D.Vennila, AP/ECE, Mr.R.Balakrishnan, AP/ECE, Mr.S.sivakumar, AP/ECE,

Mr.K.Sudarsanan,AP/ECE gave presentation on CO-PO-PSO-PEO mapping and implementation for their subjects.



Mrs.D.Vennila,AP/ECE, gave presentation on CS8351 – Digital Principles and System Design



Mr.R.Balakrishnan, AP/ECE presenting the CO-PO-mapping for Antennas and Microwave Engg



Mr.S.sivakumar, AP/ECE explaining the CO-PO-mapping for Electronic Circuits-I



Mr.K.Sudarsanan,AP/ECE gave presentation on CO-PO mapping for Signals and Systems Staff members gave their views during the presentation.

Finally, some modifications and suggestions were given by the Principal, Vice Principal and IQAC coordinator. And also they insisted to correct it and finalize the final version of CO-PO mapping at department level with all the department staff members.

Final Department level meeting with all the staff members was organized on 02-12-2020 (Wednesday) between 11.00 a.m to 12.30 p.m at DSP Lab to finalize the final version of CO-PO-PSO-PEO mapping and implementation of CAP, COAM & APQM.



Mr.W.Newton David Raj, AP/ECE presenting the CO-PO mapping for Electronic Devices.



Mr.R.Thandayuthapani, AP/ECE presenting the CO-PO mapping for Microprocessor.



Mr.S.Sivakumar, AP/ECE presenting the CO-PO-mapping for Electronic Circuits-I



Mr.T.Pasupathi, AP/ECE presenting the CO-PO-mapping for Optical communication.

Finally, HOD asked to complete the final version of CO-PO mapping and she insisted to attach the CO-PO-PSO-PEO mapping and implementation of CAP, COAM & APQM in their respective subject course plan to get approval.



Mrs.N.Mangaiyarkarasi, HOD/ECE discussed the final version of CO-PO mapping with all the staff members.

Organizing Committee

Chief Patrons Dr. R. Rajendran, Ph.D., Secretary.

Shri.T.R.S.Muthukumaar, M.B.A., Chief Executive Officer.

Patron Dr.J.Arputha Vijaya Selvi, M.E., Ph.D., Principal.

Co - Patron Dr. S. Sivakumar, M.Tech., Ph.D. Vice Principal.

Conference Chair Prof. N. Mangaiyarkarasi, HOD/Dept. of ECE.

Organizing Secretaries Mr. K. Sudarsanan, AP/Dept. of ECE.

Mr. S. Ramarajan, AP/Dept. of ECE.



Address for Communication

Organizing Secretary, Nat. Conf. ECD'21, Kings College of Engineering, Punalkulam - 613 303, Pudukkottai Dt. Tamilnadu, India. email: ncec@kingsindia.net Phone : +91 94871 03354 +91 99947 05203

CO I	VFERENCE TOPICS
	4
2	Antennas and Microwave Engineering
Y	Cognitive System Research
I	Embedded Systems
7	Green Energy
1	IoT based Instrumentation
2	Networks
0	Robotics
F.	Semiconductor Devices and VLSI
]	Signal and Image Processing
	Soft Computing
2	Wireless Communication
V	Wireless Sensor Networks

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Research Scholars	: Rs. 300
Students (UG/PG)	: Rs. 300
Other participants (Listeners)	: Rs. 100

Important Dates

Registration Fee

Last date for paper submission	: 10-03-2021
Acceptance notification	: 12-03-2021
Camera ready copy	: 13-03-2021

Guidelines

- Authors are invited to submit full papers as per the IEEE Paper Template (using two column, single spaced format with 10 pt not exceeding 8 pages) to ncec@kingsindia.net.
- Hardcopy of the certificates will be provided to the authors (max 4nos) of the manuscript and certificate to the supervisor.

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NATIONAL CONFERENCE

ON

ADVANCEMENT IN ELECTRONICS AND COMMMUNICATION FOR DIGITAL INDIA

Jointly organized by Department of ECE & IEEE STB 16621











A REPORT ON

National Conference on Advancement in Electronics and Communication for Digital India (NCECD'2021)

17.03.2021

Organized by

Department of Electronics and Communication Engineering

Mode of Presentation: Virtual Mode

The Department of Electronics and Communication Engineering of our college has organized a National Conference on Advancement in Electronics and Communication for Digital India (NCECD'2021). Delegates of the conference presented their papers in the areas of Robotics, IoT, Signal/Image processing, Wireless communication and Digital assistants.

The conference was inaugurated by Mrs.N.Magaiyarkarasi, HOD/ECE, Kings College of Engineering and delivered welcome address.



Mrs.N.Magaiyarkarasi, HOD/ECE, welcome the gatherings

The function was presided by Dr.J.Arputha Vijaya Selvi, Prinicipal, Kings College of Engineering.



Dr.J.Arputha Vijaya Selvi, Principal, delivering the presidential address

Mr. S.Ramarajan, Asst. Prof/ECE, introduced the chief guest Ms. K. Abirami, Project Implementation Manager, TATA Communication Limited, Chennai with warm greetings. Ms.K.Abirami, delivered the key note address. She enlightened the audience with her mind blowing talks on the Advancement in Communication Engineering. In her address, she stressed the importance of transforming research ideas into Advancement in Communication Engineering and emphasized the need for project based learning in Universities & Colleges. She also stated that NCECD-2021 is a huge platform for all engineering disciplines to generate and share new & innovative ideas. She briefed the role of digital India in the thermal plants, oceanography and weather forecasting.



Mr.S.Ramarajan, AP/ECE, Conference Coordinator, delivering the Chief Guest introduction



Ms.K.Abirami, Chief guest delivering the key note address

More than 50 delegates from various Engineering Colleges from Tamilnadu presented their research articles in this conference in two tracks. All the selected Papers will be published Conference Proceedings.

Papers were presented in 2 tracks; track 1 was chaired by Mr.T.Pasupathi, Assistant Professor, Department of Electronics and Communication, track 2 was chaired by Mr.S.Sivakumar, Assistant Professor, Department of Electronics and Communication Engineering.

Track 1 Link: tinyurl.com/Nconsession1

Track 2 Link: tinyurl.com/Nconsession2



Mr.K.Sudarsanan, Assistant Professor, Department of Electronics and Communication delivered the vote of thanks.



The Conference Coordinator Mr.K.Sudarsanan delivering the Vote of Thanks

Finally the conference was successfully ended with the national anthem.

Organizing Secretary

1. Mr.K.Sudarsanan, AP/ECE

2. Mr.S.Ramarajan, AP/ECE

HOD/ECF

J. More 26 [3] 10 PRINCIPAL



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NATIONAL CONFERENCE ON

EMERGING TRENDS IN COMPUTING, CONTROL AND COMMUNICATION TECHNOLOGY (ETCCCT'20) Jointly organized

by

Department of CSE, ECE & EEE



Scope

The National Conference on "Emerging Trends In Computing, Control and Communication Technology" aims to provide a forum for presenting and discussing innovations, ideas, new design and alternative technologies in the fields of Computer Science and Engineering, Electronics and Communication Engineering and Electrical and Electronics Engineering. ETCCCT'20 is being organized by Kings College of Engineering, Punalkulam, near Thanjavur, Pudukkottai District, Tamil Nadu, India. The conference also promotes affable environment for academia-industry interaction leading to exchange of research ideas and will feature keynote and invited talks by renowned academicians, industrialists and scientists of National repute.

Save	
the	
Date	

Last date for paper submission	: 27-02-2020
Acceptance notification	: 02-03-2020
Camera ready copy	: 07-03-2020
Last date for registration	: 10-03-2020

CONFERENCE TOPICS

Computer Science & Engineering

Biometric Modeling Cloud Computing Computer Networks & Security Data Mining Grid & Scalable Computing Image Processing & Pattern Recognition IoT based Instrumentation Machine Learning and Deep Learning Parallel and Distributed Computing Pervasive Computing

Web based Computing

Electronics & Communication Engineering Electrical & Electronics Engineering

Antennas and Microwave Engineering Cognitive System Research **Embedded Systems** Fuzzy and Neural based Systems Hyrbid System and Modeling Design Semiconductor Devices and VLSI Signal and Image Processing Wireless Communication Wireless Sensor Networks

Computational Intelligence in Power System, Power Electronics and Renewable Energy Sources Distributed Generation and Micro/Smart Grids **Electrical machines and Drives** Fuel Cells and Green Energy Systems **HVDC and FACTS** Intelligent Control, Robotics and Automation Systems Measurements and Data Acquisition, Safety & Reliability Power Market and Deregulation Power System Reliability and Security

Advisory Committee

Lipo Wang. Nanyang Technological University, Singapore Devaraj D, KARE Krishnankoil Krishna Kumar S, DRDO, Chennai Kumaravel S, National Institute of Technology, Calicut Raghavan S, National Institute of Technology, Trichy Ramakrishnan M. Madurai Kamaraj University, Madurai Selvakumar K, Annamalai University, Chidambaram Sivakumaran N. National Institute of Technology, Trichy

Technical Committee Agnes Idhaya Selvi KARE, Krishnankoil Aruna Jeyanthy P, KARE, Krishnankoil Albert Alexandar S, Kongu Engineering College, Perundurai Baskaran S, Kuppam Engineering College, Kuppam (AP) Giftson Samuel G, Sir Isaac Newton Engg., College, Nagappatinam Jayasankar T, University College of Engineering., Trichy Kavitha MG, University College of Engg., Rajamadam Kumar D, PRIST, Thanjavur Malathy M Veltech, Chennai Prabhu K, NIT-Surathkal, Karnataka Suganthi S Christ University, Bangalore Vinoth Kumar K. SSM Institute of Engg., & Tech., Dindigul Violet Juli



Dr.ARUN K. MAJUMDAR

U.S. Department of the Navy (Ret.) (Sr. Scientist / PI) Full Professor, Electrical Engineering and Computer Science Dept., University of Colorado Senior Research Scientist at Lockheed-California Company Visiting Professor, NIST Caltech's Jet Propulsion Laboratory MIT Lincoln Laboratory (Staff Member)

Visiting Professor, Brno University of Technology, Czech Republic

Registration Fee

Research Scholars	: Rs. 750	
Students (UG/PG)	: Rs. 500	
Other participants (Listeners)	: Rs. 200	

Payment Details

DD can be drawn in favour of "The Principal, Kings College of Engineering" payable at Thanjavur.



Organizing Committee

Chief Patrons Dr. R. Rajendran, Ph.D. Secretary

Shri.T.R.S.Muthukumaar, M.B.A., Chief Executive Officer

Patron & General Chair Dr.J.Arputha Vijaya Selvi, M.E., Ph.D., Principal

Co - Chair Dr. S. Sivakumar, M.Tech., Ph.D. Vice Principal.

Organizing Secretary Dr. A. Albert Martin Ruban, Dept. of EEE.

Programme Chair Dr.S.M. Uma, Dept. of CSE.

Convener Prof. N. Mangaiyarkarasi, Dept. of ECE

Steering Committee

Prof. S.Rajarajan, Dept. of CSE. Prof. B.Sangeetha, Dept. of CSE. Prof.R. Ponni, Dept. of ECE. Prof.P.Thirumagal, Dept. of ECE

Prof.R.Sundaramoorthi, Dept. of EEE. Dr. M. Meenalochani, Dept. of EEE.



papers in the prescribed format as per the IEEE Paper Template. Authors should only submit their original work that has neither appeared elsewhere for publication nor is under review for any other refereed publication. Submitted papers to ETCCCT'20 should be approved by the coauthors and also by the responsible authorities at the institute where the has been carried out. work Manuscript should not contain plagiarized content. Submitted papers will be run through plagiarism software.

Publications

All the accepted papers will be published in the conference proceeding with ISBN. In addition selected papers will be published in the special issue of BBRC journal based on the authors willingness on payment of additional charges.

For more details visit: www.kingsindia.net/etccct20.html

Paper Submission Authors are invited to submit full

A REPORT

ON

One Day National Conference on "Emerging Trends

Computing, Control and Communication

Technologies"

ETCCCT'20

13th March 2020



Organized

by

Department of Electronics and Communication Engineering

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

NAAC Accredited Institution

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

E-mail:kceetccct@gmail.com

Phone : 04362-282474, 282395

Website : www.kingsindia.net

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Kings College of Engineering: A GLIMPSE

Kings College of Engineering is a leading technical institute approved by All India Council of Technical Education, New Delhi (AICTE) and is affiliated to the Anna University, Chennai established by Raj Educational Trust in 2001 offering 6 courses at UG level and 4 courses at PG level. It has been accredited by NAAC and acquired ISO certification by TUV, Rheinland, Germany The institution is located at Thanjavur, a historical place of Tamil Nadu on the Thanjavur – Pudukottai Highway. It is a pioneer institute imparting knowledge in Engineering to the rural students. The institution has inspiration to provide research exposure to the engineering students and its dream came true by the establishment of Research & Development Cell. The institution has undertaken various sponsored R&D projects funded by government organizations namely DRDO, MOCIT, New Delhi.

About ECE Department:

The Electronics and Communication Engineering Department offers B.E. degree programme in Electronics and Communication Engineering from its inception and M.E degree programme in VLSI design from the year 2008. It has an excellent team of well qualified and dedicated faculties. The department has well equipped laboratories to give a wide exposure to the students in acquiring practical knowledge and hands-on-experience besides their curriculum. The inspiration of our department is to produce dynamic and globally competent engineers through excellence in Teaching, Research and Technology development.

About the Conference:

The ETCCCT'20 offers a forum for the exchange of scientific and technical Innovative concepts and new ideas in the areas of computing, control and communication technologies. Also it promotes an affable environment facilitating academicians, industry experts and scholars to exchange their research ideas for collaborative work. The thrust areas are as follows.

Thrust Areas:

- Antennas & Microwave Engineering
- Wireless Communication and sensor network
- Cognitive system research
- Embedded System Design
- Fuzzy and Neural based Systems
- Hybrid system and Modelling Design
- IOT based instrumentation
- Semiconductor Devices and VLSI
- Signal and image processing

OVERVIEW OF CONFERENCE

INAUGURAL FUNCTION

The conference was started as per the schedule at 10:00 a.m. at Chera hall with the registration of participants from reputed institutions. The conference was inaugurated with prayer and lightening the lamp.



Inaugural Function- chief guest on the stage.



Inaugural Function- Lighting the kuthuvilakku

3

The function was graced by the Chief guest of the function, Dr .Arjun K.Majumdar , Full professor ,Colorado University , USA. Dr. R. Rajendran, Secretary of Kings college of Engineering, Dr. J.Arputha Vijaya Selvi, the Principal of Kings college of Engineering, Dr. S.Sivakumar, the Vice Principal of K.C.E, Dr.A.Albert Martin Ruban , Organizing Secetary, Dr.S.M.Uma, Programme chair ,Prof.N.Mangaiyarkarasi , Convener of the conference and Head of the department of Electronics and communication Engineering, K.C.E.

Dr.J.Arputha Vijaya Selvi, General chair of ETCCCT'20 welcomed the invited guests, participants and gathering by the words. Dr. R. Rajendran, Secretary delivered presidential address and also conveyed the objectives of organizing the ETCCCT'20 at the outset. He emphasized that, this kind of conference will provide opportunity for the student's community as well as the participants to listen to the talk from eminent speakers. Dr.S.Sivakumar, Co-chair conveyed the overview of the Conference, ETCCCT'20.

The chief guest and the guest of honor was then honored with shawl and momento by the Dr. R. Rajendran Secretary, Dr. J.Arputha Vijaya Selvi, Principal of K.C.E respectively.

The conference proceeding was then released by the Chief guest Dr.K.Arjun K.Majumdar, & it was received by Prof. J.Arputha Vijaya Selvi, the principal of K.C.E



Inaugural Function- Chief Guest Releasing the conference proceeding.

The chief guest, Dr.Arjun K.Majumdar delivered the inaugural address. After the inaugural function, the expert session was started. In that session, the Invited Talk was delivered by Dr .Arjun K.Majumdar.



Inaugural Function-Invited Talk by Dr .Arjun K.Majumdar, Full professor, Coloroda university, USA



Inaugural Function- Students listening the lecture on " Free Space Optical Communication"
Technical Session:

The paper presentation session was divided into two tracks. Two tracks ran parallel where the experts and scholars presented their views on different topics pertaining to themes of ETCCCT'20. Key-note lecture, expert talks and paper presentation sessions justified the themes of conference. This conference proved its existence in contributing knowledge in the domain of communication technologies.



Students presenting the paper and Event with Judges There was a lunch break at 01:45 p.m. after the session.

VALEDICTORY FUNCTION:

After the paper presentation session, the valedictory function was organized in Chera hall of K.C.E.



Valedictory Function – NCEC'15 Organizing Chair & Organizing Secretaries on the stage - Distribution of Certificates Dr.S.M Uma, Programme chair delivered the welcome address and report of conference ETCCCT'20 at the valedictory function. Chief Guest did the certificate distribution. Prof.N.Mangaiyarkarasi, Convener delivered the Vote of thanks.



Vote of thanks by Prof.N.Mangaiyarkarasi

The function ended with national anthem.

2 Staff coordinators

HOD/E









DEPARTMENT OF ELECTRONICSAND COMMUNICATION ENGINEERING

IEEE Student Chapter Sponsored

One Day Workshop

On

One Day Workshop on Machine Learning Using PYTHON

Organized by Electronic and communication Department Dated: 14/2/2020

Faculty Coordinated by : R.Raja Pirian AP/ECE & P.Thirumagal AP/ECE

- Total Participants : 77 Students
- Place : PALLAVA HALL
- Expert Invited : **Mr.KARTHI RENGANATHAN**, BUSINESS HEAD,

IFANDFOR ENDEAVOURS

CHENNAI.

One day work shop on **Machine Learning using Python** was organized by Department of Electronics and Communication Engineering, to motivate the students to involve them in IoT Domain and also the students to get more ideas about the Machine Learning for their project works and for their career development. Mr.Karthi Renganathan, Business Head, IFANDFOR Endeavours –Chennai, was the resource person.

The workshop begins at 10.15 a.m on 14/02/2020, Mr.P.Raja Pirian, AP/ECE coordinator of the workshop, welcomes the resource person and the gathering. Mrs.P.Thirumagal, AP/ECE coordinator of the workshop give introduction about the Resource person Mr.Karthi Renenga Nathan. Business Head. IFANDFOR Endeavours. Chennai. Mrs.N.Mangiyarkarasi HoD/ECE Honored the Chief guest and delivered the presidential address. Immediately the 1st session begins with introduction about Machine Learning by Mr.Karthi Renenga Nathan, his lecture covers basics of Machine Learning and introduction to python. After the tea break the resource person continued the second session. This session covers the topics such as Linear Regression, Trees and forests which will be used for statistical.

After the Lunch break The 3nd session which was demo session, The resource person demonstrate two applications such as applications using clustering concept, Neural network in a detailed manner. All the students were actively involved in the entire sessions and got more ideas and knowledge in machine learning and python.

After Tea break the workshop ends with valedictory function. Each student from Sri Bharathi Engineering College and St.Joseph College of Engineering Technology gave feedback about the workshop.After that and Mrs.N.Mangaiyarkarasi HoD/ECE, distribute the certificates to the participants followed by Mr.P.Raja Pirian AP/ECE Coordinator of the workshop delivered the vote of thanks. The program ends with national anthem. Nearly 77 students were participated in the workshop, 17 students from other colleges(Sri Bharathi Engineering College for Womens, St.Joshep Engineering College) and 60students from CSE and ECE of kings college of Engineering.

Photo Gallery

Prayer Song:



Inagural Address By HOD:



Prize Distribution



Chief Guest Interaction with students



A one Day Workshop on "Machine Learning using Python" was organized by Department of Electronics and Communication Engineering at Pallava Hall February 14, 2020, in Kings College of Engineering, Punalkulam.

This workshop is coordinated by Mr.R.Raja Pirian AP/ECE & Mrs. P.Thirumagal AP/ECE. Welcome Speech by R.Rahapirian AP, Inagural address by N.Mangaiyarkarasi.HOD/ECE. The 75 students were attended this workshop.

Python has been designed with the provision for creating Machine Learning algorithms. Python is preferred as the best and robust platform for Machine Learning systems. Python also has numerous libraries for machine learning, data manipulation and analysis as well as a very active development community that continuously updates and creates new packages. It has been adopted by a wide variety of industries and applications including Data Science, Machine Learning, Data Analytics, Predictive Analytics, Business Intelligence and Web Analytics. This workshop aims to explore Python Programming right from installation, fundamentals to Machine Learning algorithms.

The lecture was focused on the key concepts related to machine learning and the participants received a brief overview of the following topics: Introduction to Python, Python Installation, Python Basics and Native Types, Functional Programming with Python, Introduction to Machine Learning, Future of Machine Learning in AI, Installing Anaconda and Jupyter, Overview of Numpy and Pandas, Understanding Machine Learning Algorithms, Introduction to Object Detection, Building a Face Recognition App.

Outcome of Workshop Target Audience

- > Familiarity with Python installation, syntax and design
- > Familiarity with machine learning algorithms
- > Hands-on designing of small projects on their own UG students.

Highlights of the Workshop

- > Workshop with complete hands-on experience
- > Experts from industry with more than 10 years of experience
- > Basics of Python and machine learning algorithms

The interesting examples from around the world were the highlight of the session. Workshop was more informative.







A REPORT FOR ONE DAY WORKSHOP ON

"Embedded and Real Time Systems"

on 16th AUGUST 2019

Organized by

Department of Electronics and Communication Engineering KINGS COLLEGE OF ENGINEERING, PUNALKULAM

A NAAC Accredited Institution

Recognized under 2(f) & 12(B) of UGC

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Phone : 04362-282474, 282395. Website : <u>www.kingsindia.net</u>

Name of the Event	: Workshop on Embedded and Real Time Systems
Name of the Dept	:ECE
Number of Beneficiaries	: 56
Name of the Resource Person	: Mr.Arun raja, Technical Head, Sofia Technologies Pvt Ltd, Madurai
Date	:16.08.2019

The Department of Electronics and Communication Engineering organized a one day workshop on "**Embedded and Real Time Systems**" on 16th August, 2019 at our college premises.

The Inaugural function was held on 16.08.2019 at 10.00a.m with Chief Guest Mr.Arun raja, Technical Head, Sofia Technologies Pvt Ltd, Madurai.

Dr.Shanthi , Project officer and co-ordinator of the workshop delivered the welcome speech and briefed about the Program and Mr. R.Thandayuthapani, AP/ECE, introduced the chief guest. Mrs.N.Mangaiyarkarasi, HOD/ECE honoured the chief guest.

Photos:





Mr.Arun raja, Technical Head, Sofia Technologies Pvt Ltd, Madurai, delivered a lecture on the following contents,

- Design issue of real time systems: the timing requirements
- Today's real time systems and problems with current approaches
- Challenges and work directions

COORDINATOR

HOD/ECE







Expert Lecture on Antennas for Defence Applications

Date: 09.08.2019

Venue: Pallava Hall

Time : 10.00 a.m.

Invocation Song

Welcome Address

Introducing Guest

Presidential Address

Special Address

Felicitation

Interaction with participants

Vote of Thanks

Vice Principal, KCE Dr. J.Arputha Vijaya Selvi Principal, KCE

Dr. S. Sivakumar

Dr. R. Rajendran Secretary, KCE

Dr. D. C. Pande, DRDO Distinguished Fellow Electronics & Radar Development Establishment Bangalore

Dr. S. Raghavan Professor/ECE, National Institute of Technology, Trichy

Mrs. U. Jeyamalar Assistant Professor/ECE, KCE

National anthem



EXPERT LECTURE ON ANTENNA MADE SIMPLE

The students' notion "Antenna is a tough Electromagnetic subject" is proved wrong by Dr. D.C. Pande, Dr. Raja Ramanna DISTINGUISHED DRDO Fellow, Electronics and Radar Development Establishment (LRDE), Bangalore. Dr. D.C Pande, while addressing around 400 students of Kings College of Engineering, Thanjavur, demonstrated that Antenna Engineering, the most important technology of communication, is a child's play. He made the students feel "Antenna is a popular subject of Electronics and Communication Engineering". He asked the students to be through in design, fabrication and testing. Dr. R. Rajendran, Secretary and Dr. J. Arputha Vijaya Selvi, Principal, while felicitating Dr. Pande insisted the importance of becoming professional society member.

Dr. S. Raghavan, Professor, NIT Trichy and IEEE senior member, in his address stressed that the engineering students should aspire for core engineering jobs and not for software placements. Earlier Prof. N. Mangaiyarkarasi, Head of the department of ECE, welcomed the gathering and explained about the activities of IEEE society of the college.





Report – Expert Lecture on "Biomedical Instrumentation"

Department of ECE & IEEE Student Branch (16621) organized an expert lecture on **"Biomedical Instrumentation". Dr. Raji Sundararajan**, Professor /Electrical Engineering, Purdue University, Indiana, USA, was the resource person. Her lecture titled "Electroporation based therapies for cancer", includes the concept of Electroporation, Electrochemotherapy and Electro-Gene therapy. Her lecture was focussed on the molecular and cellular events involved in tumor formation, progression, metastasis, and drug binding which are crucial to the development of innovative therapy for cancer patients. She also briefed the application of high intensity, short duration (milli and micro seconds), electrical voltage pulses for the treatment of breast carcinomas and other cancers, as drug delivery is one of the most challenging issues of the medical community. Dr.Raji Sundararajan shared her experince in treating the cancer patients and challenges faced during the treatment of cancer with application of electrical pulses with real time pictures.



Dr. Raji Sundararajan, delivering lecture



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR (2019-2020) ODD SEMESTER

REPORT ON DEPARTMENT ACTIVITIES AND LEARNING OUTCOME

In KCE, department of Electronics and Communication Engineering, We had a discussion about the Intended learning outcome based assessment and evaluation for the academic year 2018-19 odd and even semester and also about the department target vs. achieved for the academic year 2018-2019 on 16-08-19 at Digital electronics lab. In this discussion all our department staff members 17 of them were participated.

The main objective of this discussion is how to achieve our department target and how to improve it and also the learning outcome of the student in the past academic year.

Mrs. D. Vennila, AP/ECE as an IQAC member, gave the summary about the **Department target vs achieved** for the academic year 2018-19 and **Intended learning outcome based assessment and evaluation** for the academic year 2018-19 odd and even semester.

The primary purpose of the learning outcome is to review our student level and to put good effort to bring more of our students from Fair and Needs hardwork level to V.Good and Excellent level. Regarding this discussion our department HOD and all the staff members gave some ideas related to this.

- > Due to shortage of working days, we can't able to complete our target.
- > We are planning to submit more project proposals.
- Planning to conduct more workshops atleast on Saturdays, to complete our target in the forthcoming semesters.
- Motivated all the students to participate in intradepartmental paper presentation and mini project Expo.
- > Insisted the students to participate in national and international conferences.
- Regarding LO, planned to give more revision classes and repeated class tests.
- > Planning to give more no. of exams to avoid exam fear for students.
- Mainly we are concentrating to reduce the absentees.



Mrs. D.Vennila, explaining about the Learning outcome and department activities to all the ECE staff members.



Report - Special Lecture

R&D section and ISTE Staff Chapter (TN 205) organized a special lecture **"Dos & Don'ts in drafting Proposals"** on 16.03.2019. Dr. S. Krishna Kumar, Senior Technical Officer, DRDO, Avadi, Chennai, was resource person. In his lecture, he insisted the staff members to prepare proposals according to the guidelines of the funding agency. In addition, he briefed on the smart technologies and innovations that are deployed for the surveillance of our nation. While concluding, he insisted the staff to advise the students to contribute their technical knowledge in an effective way for the betterment of our Nation.



Dr. S. Krishna Kumar delievering lecture.

Principal

ER

Prepared by T.Pasupathi

Organizing Committee

Chief Patrons: Dr. R. Rajendran, Secretary Mr.T.R.S.Muthukumaar, CEO

Patron: Dr. J. Arputha Vijaya Selvi, Principal Co-Patron:

Dr.S.Sivakumar, Vice Principal

Conference Chair Prof. N. Mangaiyarkarasi, HOD(i/c)/ECE

Organizing Secretaries: Mr. A. Herald, AP/ECE Mrs. U. Jeyamalar, AP/ECE

Advisory Committee: Dr. Pallapa Venkataram Indian Institute of Science, Bangalore Dr.S. Raghavan National Institute of Technology, Tiruchirappalli Dr.S. Krishna Kumar, Defence Research and Development Org., Chennai. Dr.P. Dananjayan Pondicherry Engineering College, Pondicherry Dr.N. Sivakumaran National Institute of Technology, Tiruchirappalli Dr.M. Aramudhan Perunthalaivar Kamarajar Inst.of Engg., & Tech, Kanikal Dr.P.A. Manoharan Chairman, IEEE Madras Section Dr.D. Javanthi GRIET, Hyderabad Dr.S. Suganthi CHRIST University, Bangalore Dr.Shanthi prince SRM Institute of Science & Technology, Chennai. Dr.A. Balaji Ganesh Velammal Engineering College, Chennai Dates to remember

 Dates to remember

 Last date for submission of full papers: 25.02.2019

 Intimation of Acceptance
 : 28.02.2019

 Deadline for registration and

 Camera ready paper submission
 : 05.03.2019





About the Institution

Kings College of Engineering (KCE) is an institution which was formed with the single aim of providing quality education to the poor and underprivileged students. KCE is approved by All India Council for Technical Education (AICTE), New Delhi and is affiliated to Anna University, Chennai. The institution was established in the year 2001 on a sprawling campus of around 60 acres on the Thanjavur -Pudukkottai Highway and run by Raj Educational Trust (RET), Chennai. The institution offers five UG and five PG programmes, certified with ISO 9001:2008 and accredited by NAAC. The state of the art teaching methodologies are used to impart high quality education to the students including e-learning.

About the Department

The Department of Electronics and Communication Engineering was established with state of art laboratories in the year 2001. It is continuously upgrading the infrastructure and laboratory facilities with the emerging technology as per the industrial needs. The department is recognized as research centre for collaborative research by Anna University, Chennai. A significant number of research projects funded by government and non-government organizations viz. DRDO, MCIT, AICTE New Delhi, TNSCST, Chennai and Texas Instruments USA have been successfully carried out.

About the Conference

The National Conference on Emerging Trends in Electronics and Communication Engineering (ETECE'19) is to provide a forum for presenting and discussing new design, issues and novel methods and alternative technologies in the area of Embedded Systems and Networking. It provides a platform for students, research scholars. academicians and industrv professionals for sharing and exploring new areas of research and development. It will feature keynote lectures by renowned academicians to enhance their knowledge in the area of Signal Processing, VLSI design and other related fields.

Themes

- Semiconductor Devices
- Control Systems
- Digital & Analog Circuits and Application
- Embedded & VLSI Design
- Signal Processing/Image processing
- Wireless communication systems and networking
- Ad-hoc and Sensor Networking
- Communication and Information System
 Security
- Satellite and Space Communication
- Optical Network and Systems
- Optoelectronic Circuits
- Microelectronics
- Nanotechnology
- Electric Vehicle Technologies
- AI & Robotics
- Under Water Communication
- Organic Electronics,etc.,

Paper Format

Full Paper not exceeding 5 pages should be submitted in IEEE double column format (soft copy in MS-Word as E-mail attachment). After acceptance, 2 hard copies of the paper along with Registration Fee in the form of Demand Draft should be submitted.

Organizing Committee

Chief Patron

Dr. R. Rajendran Secretary Mr. T.R.S. Muthukumaar Chief Executive Officer

Patron

Dr. J. Arputha Vijaya Selvi

Prinicipal, Kings College of Engineering.

Co-Patron

Dr. S. Sivakumar

Vice Principal

Organizing Chair

Mrs. N. Mangaiyarkarasi Academic Coordinator, ECE **Organizing Secretaries**

Mr A Horald AD/ECE

Mr.A.Herald, AP/ECE Mrs.U.Jeyamalar, AP/ECE Advisory Committee

Dr.Pallapa Venkataram, IISC, Bangalore. Dr.S.Raghavan,NIT, Trichy. Dr.S.Krishna Kumar, DRDO, Chennai. Dr.P.Dananjayan, PEC, Pondicherry. Dr. N. Sivakumaran, NIT, Trichy. Dr. P.A Manoharan, IIT Research Park, Chennai Dr.Shanthi prince, SRMIST, Chennai. Dr.S.Suganthi, CHRIST,Bangalore. Dr.D.Jayanthi, GRIET, Hyderabad. Dr. M. Aramudhan, PKIET, Karaikal. Dr .A. Balaji Ganesh, VEC, Chennai.

Technical Committee

Dr.A.Sivanantha Raja, GCE, Bargur. Dr.G.NAGARAJAN, PEC, Pondicherry. Dr.Saravanan Chandran,NIT, Durgapur. Dr.C.Vennila, SCE, Trichy. Dr.S.Albert Alexander, KEC, Erode. Dr. R. Boopathi Rani, NIT, Karaikal. Dr. V. Sakthivel, NIT, Calicut. Dr.K.Prabu, NIT, Warangal. Dr.T.Jayasankar, BIT Campus, Trichy. Dr.R.Vimalathithan, KCE, Coimbatore.

Registration Fee

PG students /Faculty Members /

Research Scholars : Rs. 1000/*-

Others participants(Listeners): Rs. 300/-

- Selected Papers will be published in Indexed Journals.
 - *Including publication charges.

Important Dates

Submission of Full Paper	: 25.02.2019
Notification of Acceptance	: 28.02.2019
Last date for Registration	: 12.03.2019

Contact Address

The Organizing secretaries – ETECE'19, Dept. of ECE, Kings College of Engineering Punalkulam, Thanjavur. 94868 02587 / 97914 68414 Email: ncec@kingsindia.net



National Conference on Emerging Trends in Electronics and Communication Engineering (ETECE-19) on 15st March, 2019



Organized by Department of Electronics and Communication Engineering

Technically sponsored by Robotics & Automation Society, IEEE Madras Section

KINGS COLLEGE OF ENGINEERING (NAAC Accredited Institution) Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai Phone : 04362-282474



KINGS COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai. Punalkulam, Thanjavur – 613 303 A NAAC Accredited Institution (Recognized under 2(f) & 12(B) act of UGC) Phone : 04362-282474



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2018-2019 EVEN SEMESTER

REPORT

National Conference

on

Emerging Trends in Electronics and

Communication Engineering

(NCETECE'2019)

DATE: 15.03.2019

VENUE : CHERA HALL, AV HALL, DSP LAB

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR 2018-2019 (EVEN SEMESTER)

REPORT

National Conference on Emerging Trends in Electronics and Communication Engineering (NCETECE-19)

DATE: 15.03.2019

VENUE: CHERA HALL, AV HALL, DSP LAB

The National Conference on Emerging Trends in Electronics and Communication Engineering (NCETECE'19) aims to provide a forum for presenting and discussing new design, issues and novel methods and alternative technologies in the area of Electronics and Communication Engineering. It provides a platform for students, research scholars, academicians and industry professionals for sharing and exploring new areas of research and development. NCETECE'19 will feature keynote lectures by renowned academicians to enhance their knowledge in the area of Electronics and Communication Engineering and other related fields.

NCETECE-19 was organized by department of ECE and technically sponsored by Robotics & Automation Society of IEEE Madras Section.

72 papers were received, out of which 58 quality papers were accepted. Enthusiastic response was received all around 50 full manuscripts were uploaded on Easy Chair. 46 papers were accepted after a rigorous review, making it very selective. 46 accepted papers were distributed for 2 Oral Sessions.



Dignitaries on the Dias

Hard copy of the conference proceedings was released by Dr J. Arputha Vijaya Selvi, Principal, Kings College of Engineering received by Dr. S. Krishnakumar, Senior Technical Officer, DRDO, Avadi, Chennai.



Release of Hardcopy of the proceedings

Mrs.U. Jeyamalar, Asst.Prof/ECE, introduced the chief guest Dr. S. Krishnakumar, Senior Technical Officer, DRDO, Avadi, Chennai with warm greetings. Dr. S. Krishnakumar, delivered the inaugural address. He enlightened the audience with his mind blowing talks on the Emerging trends in Communication Engineering.



Mrs.U. Jeyamalar, Asst.Prof/ECE introducing the Chief Guest Dr. S. Krishnakumar

Dr. S. Krishnakumar, Senior Technical Officer, DRDO, Avadi, Chennai delivering Inaugural Address

Dr.S.Sivakumar, Vice Principal, KCE offered felicitations and explained about the newer technologies for the next decade.

After the tea break the technical session had been started, for this conference more than 70 papers from various colleges had received and about 46 papers were presented in the conference.

Papers were presented in 2 tracks; track 1 was chaired by Dr. S. Krishnakumar, Senior Technical Officer, DRDO, Avadi, Chennai and Mr.W.Newton David Raj, AP/ECE, track 2 was chaired by Dr.T.Shanthi, Associate Professor/ECE and Mrs.R.Ponni, AP/ECE.



Refreshment with Chief Guest



Session Chair & Co-Chair during the technical session



The Jury Panel evaluating the papers at the Conference



Delegates presenting their research work in the technical session

This conference was highly productive and provided participants with opportunities to make new contacts and refresh the existing network links as well as to discover and explore new ideas in the area of Electronics and Communication Engineering.

Valedictory Function:

The paper presentation certificates to the participants were awarded. Mr. A. Herald delivered the Conference Summary and Vote of thanks, to participants from various institutions and our institution for their keen interest in participating in this national conference, acknowledging the tireless efforts of the members of the working committee, and the non-teaching faculty for smooth functioning of the event.



Mr.A.Herald, AP/ECE delivering Conference summary & Vote of thanks



Mrs.N.Mangaiyarkarasi, HOD/ECE distributing certificates to the participants



Distributing certificates to the participants

Finally the conference was successfully ended with the National Anthem.

Registration Form

Workshop on

1. Name (in block letters) :

- 2. Designation: 3. Institution / Organization: 4. Postal Address: 5. E-mail:
- 6. Phone No. / Mobile: 7. D.D No. Date:

Bank/Branch:

Signature of the applicant

Dept. of Electronics & Communication Engg., Kings College of Engg., Punalkulam- 613303. Phone : 04362 - 282474

Organizing Committee

Chief Patrons: Dr. R. Rajendran Secretary

Mr.T.R.S.Muthukumaar, Chief Executive Officer

Patron: Dr. J. Arputha Vijaya Selvi Principal

Co-Patron: Dr.S.Sivakumar Vice Principal

Convenor: Dr. D. Kumar Professor/ECE

Co-ordinators: Mr. T. Pasupathi AP/ECE

Mr. J. Niranjan Samuel IRF/ECE-R&D

Registration fees:

Registration fee has to be paid in the form of demand draft drawn in favour of Kings College of Engineering - IEEE Student Branch payable at Thanjavur. Registration fee includes course material lunch and refreshment.

UG/ PG Students : Rs. 600/-: Rs. 800/-Faculty

Last Date for Registration :18.02.2019 Confirmation of Acceptance:22.02.2019 For further information contact : Mr. T. Pasupathi - 98941 04645 Mr. J. Niranjan Samuel - 99947 18168





27th & 28th February, 2019



Jointly organised by Department of Electronics & Communication Engg., R&D Section

bout our Institution:

Kings College of Engineering (KCE), since its inception ir the year 2001, provides quality education to the needy aspirants including under-privileged students of this Technical Education, New Delhi, affiliated to Anna Situated on the Thanjavur - Pudukkottai Highway, the

About R & D Section:

The Department of Electronics & Communication, Electrical & Electronics Engineering and Mechanical Engineering are recognized as research centres for collaborative research by Anna University, Chennai. A significant number of projects funded by various government and non government funding sectors namely DRDO, MCIT, AICTE, New Delhi, TNSCST, Chennai, Analog Devices, USA & Texas Instruments, USA are successfully carried out.



About the workshop:

The workshop will address the clinical management of Coronary Artery Diseases with newer tools, various ways and means by which information and communication technology applications in health care sector focusing on selective diagnosis, emergency & longterm clinical care to people and the regulatory requirements of medical devices. Machine Intelligence (MI) aims at mining relevant information directly from the derivative physiological data, leads to better performance in comparison to human that is suffered by status of mind and mental variability. Evolutions of new machine learning algorithms are helping the even disrupted pattern of raw physiological data in terms of better classification. MI has been playing many different roles in scientific research and the literature has shown that Artificial Intelligence (AI) is promising in solving complex problems in many applications, particularly in areas with huge amounts of data but very little theory. Thus, it can be supportive to develop new decision support system including the devices. Also this workshop will explore the possibility of reducing the cost & complexity involved in healthcare practices thereby benefiting healthcare professionals and ultimately aims to provide quality healthcare to people at a lesser cost





nennai he attained her Doctorate degree fr ersity with specialization in Molecu began her career as Scientist-Toxicolo han one decade of experience, well train iples and expertise in preclinical stu xecution (executed more than 400 both in



Dr. S. Shanthi, Prof/Dept. of Electronics & Commn. Eng., Aditya Institute of Technology, Coimbator Highly motivated Professor, Positive ap-proach, consistently strive to create a challenging and angaging learning environment in which the students become life long scholars and learners, interested in continuing research in Bio medical engineering combined with artificial intelligence. with artificial intelligence



Annamalai University, Prof. R. Malathi, thrust areas are amputational Bioengineering, modeling of various ysiological systems which includes, cancer cells, nacedle anglion cells. Her research area has oneered with effects of sodium channels on Arrhythmia mathematical model of human cardiac ventricular Ils. Her thesis won the best thesis award at IIT Madras



THE HINDU 12.03.2019 PAGE 5



Kings College of Engineering at Punalkulam near Thanjavur organised a two-day national workshop on 'Biomedical Interventions' recently. Dr.K.Damodaran, Senior Consultant and Interventional Cardiologist, Apollo Hospital, Chennai, inaugurated the workshop. Dr.J.Arputha Vijaya Selvi, Principal, presided. Dr.S.Baskaran, Biomedical Engineer, Gentech Marketing Pvt.Ltd, New Delhi, Dr. Kiran George, Associate Professor, Electronics and Instrumentation Engineering, Annamalai University and Dr. G.Shanthi, Scientist, Manager Preclinical, Microtherapeutics Research Labs, Chennai, spoke.



Report National Workshop on "Biomedical Interventions"

Kings College of Engineering, Punalkulam near Thanjavur organized a two day National Workshop on **Biomedical Interventions** on 27th & 28th February, 2019. Dr. K. Damodaran, Senior Consultant & Interventional Cardiologist, Apollo Hospital, Chennai, inaugurated the workshop. Dr. J. Arputha Vijaya Selvi, Principal, presided over the function and delivered presidential address. Dr. K. Damodaran, in his lecture, stated coronary artery disease develops when the major blood vessels that supply the heart with blood, oxygen and nutrients (coronary arteries) become damaged or diseased. Cholesterol-containing deposits (plaque) in the arteries and inflammation are usually the cause for coronary artery disease. The damage may be caused by various factors, including: Smoking, High blood pressure, High cholesterol, Diabetes or insulin resistance and sedentary lifestyle. To improve the heart healthcare, one should quit smoking, control conditions such as high blood pressure, high cholesterol and diabetes. He also explained about surgical procedure involved in robot assisted cardiac surgery. While concluding his lecture, he said to stay physically active, consume low-fat and lesssalt diet, and consume fruits, vegetables and whole grains and advised to maintain a healthy weight and manage stress.

Dr. S. Baskaran, Biomedical Engineer, Gentech Marketing Pvt. Ltd., New Delhi started his lecture with the major instruments used in acquiring bio-signals from human beings. Also he demonstrated the real-time Electro Cardio Gram (ECG) acquisition from one of the participant with four channel data acquisition development device and necessary electrodes. His lecture includes analysis of the acquired data and report preparation for the end user. **Dr. Kiran George**, Assoc. Professor, Electronics and Instrumentation Engineering, Annamalai University, Chidambaram, delivered lecture. In his lecture he briefed about multiscale physiological model of organ system which provides an opportunity for the researcher and clinician in the field of mathematical oncology. While concluding his lecture, he suggested how these new directions could contribute in addressing the current challenges in the field of Biomedical Engineering.

Dr. G. Shanthi, Scientist, Manager Preclinical, Microtherapeutics Research Labs, Chennai, delivered a lecture on synthetic biomaterials and its applications, Biocompatibility Regulatory Testing and its biological effects. She concluded her lecture with a case study on biomaterial implantation in animals. **Dr. S. Shanthi**, Professor & Head/ECE, Adithya Institute of Technology, Coimbatore delivered a lecture. In her lecture, she briefed that MI plays various roles in scientific research. Artificial Intelligence (AI) provides promising solutions in solving complex problems in many applications, particularly in areas with huge amounts of data but very little theory. It helps to develop new decision support system including the devices.

A total of 63 participants from various institutions situated at U.T of Pondicherry, Karnataka and Andra Pradesh, Tamil Nadu participated in the programme and got benefitted.



Dignitaries on the Dias



Mrs. N. Mangairyarkarasi, HOD(i/c)/ECE welcoming the gathering



Ceremonial Lighting of the Lamp



Dr. D. Kumar, Professor/ECE introducing Dr. K. Damodaran, Chief Guest



Dr. J. Arputha Vijaya Selvi, Principal honouring Dr. K. Damodaran, Interventional Cardiologist



Dr. K. Damodaran, Interventional Cardiologist, Apollo Hospital, Chennai delievering Inaugural Address



Dr. Kiran George during invited lecture session



Dr. J. Arputha Vijaya Selvi delivering presidential address



Dr. K. Damodaran, during invited lecture session



Dr. S. Baskar during demonstration session



Dr. G. Shanthi during invited lecture session



Students during the activity session



Participants receiving certificates from dignitaries



Dr. S. Shanthi during invited lecture session



Participant during feedback session



Mr. T. Pasupathi during workshop summary and vote of thanks

Report Guest Lecture on "Biomedical Image Processing"

Guest Lecture on **"Biomedical Image Processing"** was organized on 01.02.2019 at Conference Hall. Prof. Eric A. Hoffman, Prof. Emma Stapleton and Prof. Abilash from University of IOWA, IOWA, USA were the resource persons. Prof. Dr. J. Arputha Vijaya Selvi, Principal, gave a warm welcome to the gathering. Prof. A. Hoffman was introduced to the gathering by Dr. S. Sivakumar, Vice Principal. Prof. Eric A. Hoffman and his team was honoured by our Principal and Vice Principal.

Prof. Emma Stapleton, delivered a lecture on "Air Pollution in India". Her lecture was focussed on the effects caused by cooking without ventilation by using wood. Using case studies, she stated that in Tamil Nadu the toxic level is less compared to other states particulary in North India.



Prof. Eric during the lecture



Prof. Emma during the lecture

Prof. Eric A. Hoffman, delivered a lecture on "Evaluation of Pulmonary Effects of Cooking Indoors with Solid Biofuels and Poor Ventilation". In his lecture, he stated that smoking causes severe chronic obstructive lung diseases and other ailments. Besides, the smoke emitted by solid biofuels is equivalent to the side effects caused by smoking in cases of chronic lung diseases. While, concluding his lecture, Dr. Hoffman's briefed on the facilities available at his laboratory, a research dedicated state-of-the-art multi-spectral, multi-detector row spiral CT (MDCT) scanner and an in vivo micro CT scanner. Through a relationship with Siemen's Medical, the MDCT scanner is the state-of-the-art scanner to promote novel lung imaging. Prof. Eric A. Hoffman and his team, responded to the queries raised by the students and staff members. During the response to the lecture, Ms. Mowli, Final year /ECE said that the lecture was an eye opener in the field of Biomedical Instrumentation and students got a deep insight on the topic. The HODs of all departments, senior faculty members and students attended the programme. Dr. D. Kumar, Professor/ÉCE, coordinated the programme.

PRINCIPAL Kings College of Engineering Punalkulam- 61,3 303.



Research & Development Section

Report Expert Lecture on "Research Opportunities"

Expert Lecture on **"Research Opportunities"** was organized on 02.02.2019 at Chera Hall under AICTE - MARGDHARSAN scheme of National Institute of Technology, Tiruchirappalli. Prof. Dr. Rominus Valsalam, Professor, APJ Abdul Kalam Technological University, Thiruvananthapuram was the resource person. Prof. Dr. J. Arputha Vijaya Selvi, Principal, gave a warm welcome to the gathering and introduced Prof. Dr. Rominus Valsalam to the gathering. Prof. Rominus Valsalam was honoured by Dr. S. Sivakumar, Vice Principal with shawl and by Dr. J. Arputha Vijaya Selvi, Principal with a momento.







Dr. J. Arputha Vijaya Selvi honouring Prof. Rominus





Dr. J. Arputha Vijaya Selvi, welcoming the gathering



Dr. S. Sivakumar honouring Prof. Rominus



A view of the participants

Dr. Rominus Valsalam deliverd a lecture on **"Research Opportunities"**. In his lecture, he described on the opportunities for students to carry out their project work at various government organizations and institutions. In addition, he briefed that solutions for problems that are not solvable can be found by working at industries. Also he insisted the students to carry out their projects on their own or through industrial support rather than purchasing from centers. Before, summarizing the lecture, he covered the applications of IOT and IIOT. On concluding his lecture, he insisted the students to publish their findings either in Journal or Conferences.



Prof. Rominus during the lecture



Student interacting with Prof. Rominus



Prof. N. Mangaiyarkarasi, HOD(i/c)/ECE, proposing vote of thanks

Prof. Rominus Valsalam, responded to the queries raised by the students. The HODs of all departments, senior faculty members and selected students from all engineering disciplines attended the programme. Prof. N. Mangaiyarkarasi, HOD(i/c)/ECE proposed vote of thanks.

Prepared by

Principal







REPORT

One Day

(09-03-2018) Workshop on

CAD for VLSI

CO ordinators

Mr.W.Newton David Raj AP/ECE Mr.P.Raja Pirian AP/ECE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING KINGS COLLEGE OF ENGINEERING PUNALKULAM One day work shop on CAD for VLSI organized by department of Electronics and communication engineering held on 09-03-2018, to motivate the students to involve them in VLSI Domain and also the students got more ideas about tools used in CAD. Dr.M.Joseph, Principal. St.Joseph College of Engineering and Technology, Thanjavur & Mr.T.Pasupathi AP/ECE, Kings college of Engineering were the resource persons.



The workshop was begins at 10.10a.m, Mr.P.Raja Pirian AP/ECE welcomes the resource person and the gathering, followed by Mr.W.Newton David Raj AP/ECE introduced the chief guest, Mrs.T.Shanthi, Project officer delivered the inaugural address after that the chief guest was honored by Mrs.T.Shanthi. Finally Dr.M.Joseph delivered the chief guest address. Immediately the 1st session begins with a Lecture on Introduction to CAD for VLSI by Dr.M.Joseph. After the Lunch break The 2nd session was continued by Mr.T.Pasupathi AP/ECE at VLSI lab with CAD tools. The students were actively involved in the entire sessions. The program ends with valedictory.

Nearly 41 students were participated in the workshop; 28 students from our college and the remaining participants from KSK Engineering college and Vandaiyar engineering college.

KINGS COLLEGE OF ENGINEERING, PUNALKULAM

<u>Department of Electronics and Communication Engineering</u> <u>Report – One day Workshop on "Internet of Things using Arduino and Raspberry Pi"</u>

Department of Electronics and Communication Engineering and IEEE Student Branch of our college organized a **One Day Workshop on "Internet of Things using Arduino and Raspberry Pi**" on 20th March, 2018, where 84 students and 4 faculty from various Engineering colleges gained knowledge. The objective of the workshop is to provide Hands-on training on IoT. Participants learnt and practically embedded programs to Arduino and Rasberry Pi board. Students gained much more knowledge about practical implementations of IoT under the guidance of our resource person **Mr. A.Jeevanantham, Assistant Professor/Information Technology, Kongu Engineering College**, Perundurai.

Coordinators:

- 1. Mr.T.Pasupathi, Assistant Professor/ECE
- 2. Mr.A.Herald, Assistant Professor/ECE

Inaugural Session:

The dignitaries on the Dais during the inaugural session were Dr.T.Shanthi, Project Officer, Mrs. N. Mangaiyarkarasi, Ac. Coordinator / ECE and Mr.T.Pasupathi, AP/ECE. The program was started with Thamizh Thaai Vaazthu followed by welcome address delivered by Mr.T.Pasupathi, AP/ECE. Dr. T. Shanthi, Project officer, delivered the presidential address, she briefed the technologies used in our day today life and the overview of IoT devices in various applications. Mr. A.Jeevanantham, Assistant Professor/Information Technology, Kongu Engineering College, delivered the inaugural address. Mrs.N.Managaiyarkarasi, Ac.Coord, delivered felicitation address. She briefed the objectives and scope of the workshop.



Welcome Address by Mrs. T.Pasupathi



Presidential address by Dr. T.Shanthi
Session 1- Overview of Internet of Things.

During the session, Mr. A.Jeevanantham, AP/IT, KEC, Perundurai, discussed real life use cases on IoT application and make the session really interactive by providing an opportunity to suggest a solution to real life scenario.



Inaugural address by Mrs.N.Mangaiyarkarasi



View of Participants

Session 2- Hands on training on IoT platform using Ardiuno and Rasberry Pi.

The second session of workshop was planned to provide hands on experience with IoT device and application. Participants were introduced to the Arduino and Rasberry Pi concept from a programming point of view and its relevance to IoT device. All the participants participated in coding for accessing IoT device through android application.







Dignitaries issuing certificate to the participants

Valedictory Function:

The participants shared their feedback about the training programme. Dignitaries, distributed the certificates to the participants. Mr. A. Herald, AP/ECE delivered the vote of thanks. Finally the program ended with National anthem.

Ac. Coordinator (ECE) 5. 1001 Principal







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR (2017 -2018) EVEN SEM

REPORT

ON

FACULTY DEVELOPMENT PROGRAMME

(SPOKEN TUTORIAL WORKSHOP ON LATEX & e-SIM)

(29-04-2020 & 04-05-2020)



SPOKEN TUTORIAL

SOFTWARE TRAINING PROJECT

Developed by IIT BOMBAY

A PROJECT OF THE MICHAEL MUSICAL OF IDOCATION THROUGH INT Spoken-tutorial.org







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR (2017-2018) EVEN SEM

REPORT ON SPOKEN TUTORIAL WORKSHOP - SCILAB

In KCE, department of Electronics and Communication Engineering, has organized a Spoken Tutorial Workshop for ECE faculty members at Block-II CSE lab. Totally **20** staff members have enthusiastically participated in this Workshop.

The Spoken Tutorial project is being developed by IIT Bombay for MHRD, Government of India. This is the initiative of the 'Talk to a Teacher' activity of the National Mission on Education through Information and Communication Technology (ICT), launched by the Ministry of Human Resources and Development, Government of India.

The main objective of this Spoken Tutorial workshop is to improve the employment potential of our students by teaching them IT skills. There are about 630 original spoken tutorials, created in English. Spoken Tutorials cover many useful IT topics, such as Basic IT Literacy, Tux Typing, KTurtle, C, C++, Java, PHP, Linux, Scilab, Python, OpenFOAM, PERL, Ruby, LibreOffice, Blender, GeoGebra, Jmol, GChemPaint and Inkscape.

These videos are dubbed into all 22 Indian languages. In each of the following languages, we have more than 100 tutorials: Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Nepali, Punjabi, Sanskrit, Tamil, Telugu and urdu. Including the dubbed tutorials, there is a total of 4200 videos.

Spoken Tutorials can be downloaded free of cost from the website, http://spoken-tutorial.org.

As a part of our IQAC activities, we have conducted the spoken tutorial workshop in the topic of **SCILAB**.

SCILAB is an open source computational software used for writing user defined subroutines for solving complex mathematical problems. This workshop will help participants to develop good understanding of computational software and have good hands on experience on how to solve different engineering problems using the software. The main focus of the course is on imparting the importance of using such tools and as well making the participants familiar with industry grade problems and solutions in engineering.

Mrs. K. Abhirami, AP/IQAC Head, welcomed the staff members and she insisted the importance of the spoken tutorial workshop.



The staff members enthusiastically attending the workshop.

After attending the workshop the staff members had an idea about this **SCILAB**. More videos on **SCILAB** were given as softcopy to the staff members to prepare themselves and to attend the online Exam.

Online exam on SCILAB was conducted to the staff members on 29-06-2018 at CSE LAB-I.



The staff members attending the online Exams.

The exam duration was about 45 minutes. After the exam, certificates were generated to the staff those who have secured above 40 % of marks to their individual User Id.



The sample certificates.

After the session was completed, Feedbacks were collected from the staff members to know their opinion about the workshop.

About the Institution

Kings College of Engineering (KCE) is an institution which was formed with the single aim of providing quality education to the poor and underprivileged students. KCE is approved by All India Council for Technical Education (AICTE), New Delhi and is affiliated to Anna University, Chennai. The institution was established in the year 2001 on sprawling campus of around 60 acres on the Thanjavur -Pudukkottai Highway and run by Raj Trust (RET), Educational Chennai. The institution offers six UG and five PG progrommes and certified with ISO 9001:2008. The state of the art teaching methodologies are used to impart high quality education to the students including e-learning.

About the Department

The Department of Electronics and Communication Engineering was established with state of art laboratories in the year 2001. It is continuously upgrading the infrastructure and laboratory facilities with the emerging technology as per the industrial needs. The department of Electronics and Communication Engineering is recognized as research center for collaborative research by Anna University, Chennai. A significant number of research projects funded by government and nongovernment organizations viz. DRDO, MCIT, AICTE New Delhi, TNSCST, Chennai and Texas Instruments USA have been successfully carried out.

About the Conference

The National Conference on Signal Processing & VLSI Design (NCSPVD'16) is to provide a forum for presenting and discussing new design, issues and novel methods and alternative technologies in the area of signal processing and VLSI Design. It provides a platform for students, research scholars, academicians and industry professionals for sharing and exploring new areas of research and development. It will feature keynote lectures by renowned academicians to enhance their knowledge in the area of Signal Processing, VLSI design and other related fields.

Topics

- Ad Hoc / Sensor Networks
- Antenna & Wave Propagation
- ASIC Design
- Biomedical Imaging
- CAD VLSI
- Embedded/RTOS Applications
- Image/Video Processing
- Low Power VLSI/VLSI Testing
- Mobile/ Satellite Communications
- Nano Electronics
- Network Security and Management
- Pattern Recognition
- RF Design & Microwave
 Communication
- Soft Computing Techniques
- VLSI/Reconfigurable Architectures
- Wavelet Transform & Applications
- Wireless Communications

Paper Format

Full Paper not exceeding 5 pages should be submitted in IEEE double column format (soft copy in MS-Word as E-mail attachment). After acceptance, 2 hard copies of the paper along with Registration Fee in the form of Demand Draft should be submitted.

Organizing Committee	Technical Committee	National Conference
Chief Patron	Dr. D. Sriramkumar, NIT, Tiruchirappalli	on
Smt. Sharmila Rajaa B.E.,	Dr. A. Balaji Ganesh, VEC, Chennai	Signal Processing and
Chief Financial Officer	Dr. R. Amirtharajan, SASTRA, Thanjavur	VLSI Design
Mr. T.R.S. Muthukumaar M.B.A.,	Dr. A. Arockia Bazil Raj, DIAT, Pune	28 th December 2016
Chief Executive Officer	Dr. S. Suganthi, Christ University, Bangalore	20 Detember 2010
Patron	Registration Fee	Organized by
Dr. S. Durairaj B.E., M.E., Ph.D., PDF.,	PG students : Rs.500/-	Department of Electronics and
Principal	Faculty Members/	Communication Engineering
Co-Patron	Research Scholars : Rs. 1000/-	
Dr. S. Sivakumar	Others participants : Rs. 300/-	
Vice Principal	 Selected Paners will be published in 	
Conference Chair	International Journal of Engineering	
Dr. J. Arputha Vijaya Selvi	Research and Technology	
HOD(ECE) & Dean	Important Dates	
Organizing Secretaries	Submission of Full Paper : 11.11.2016	
Mr. P. Raja Pirian, AP/ECE	Notification of Acceptance : 18.11.2016	
9994009225	Last date for registration : 03.12.2016	KINGS
Mrs. N. Mangaiyarkarasi, AP/ECE	Contact Address	
Advisory Committee	The Convenor-NCSPVD'16	
Dr. T. Srinivas, IISc, Bangalore	Dept. of ECE	
Dr. S. Raghavan, NIT, Tiruchirappalli	Kings College of Engineering Punalkulam. Thanjayur	KINGS COLLEGE OF EGINEERING NBA Accredited Institution
Dr. D. Kumar, PMU, Thanjavur		(Approved by AICTE, New Delhi & Affiliated to
Dr. P.S. Kannan, KCE, Punalkulam	e-mail : ncec@kingsindia.net	Anna University, Chennai)
Dr. J. P. Lancelot, IIAP, Bangalore		Phone : 04362-282474, 282395







Department of Electronics and Communication Engineering National Conference on Signal Processing and VLSI Design

A detailed report on the National Conference on Emerging Trends in Signal Processing and VLSI Design, (NCSPVD-2016)

NCSPVD-2016 was organized by department of ECE and technically sponsored by IETE. A target of 50 papers was set, out of which 40 quality papers would be selected. Enthusiastic response was received all around 45 full manuscripts were uploaded on Easy Chair. 40 papers were accepted after a rigorous review, making it very selective. 40 accepted papers were distributed for 2 Oral Sessions.



Honoring the chief guest Dr.S.Devaraj by Dr.S.Sivakumar

Dr.S.Sivakumar honoring Dr.R.Vimalathithan

Inauguration

NCSPVD-16 commenced with formal registration. Inaugural ceremony was initiated with prayer song. **Dr S.Sivakumar, Vice Principal and Conference Chair,** welcomed the gathering followed by lighting of ceremonial lamp by the dignitaries. Dr.J.ArputhaVijaySelvi, HoD/ECE honored the guests.



Dr. J. Arputha Vijaya Selvi giving memento to Dr.S.Devaraj

Dr. J. Arputha Vijaya Selvi giving memento to Dr.R. Vimalathithan



Release of the Hardcopy of proceedings

Hard copy of the Conference Proceedings was released by the special guest **Dr.R.Vimalathithan** received by **Dr.S.Devaraj Dean, Kalasalingam University.** Soft copy of the Proceeding was released by **Dr.S.Devaraj received by Dr.S.Durairaj, Princial Kings college of Engineering.**

Dr.S.Durairaj,Principal, Kings College of Engineering, presided over the function and delivered the presidential address. He insisted the importance of conference and asked the authors to involve in the research.

Mrs.A.Praba Assistant Professor/EEE Introduced the chief guest **Dr.D.Devaraj Dean/Academics/EEE**, **Kalasalingam University, Krishnanakovil.** Dr.D.Devaraj delivered the inaugural address. He insisted the authors to involve in research and find a solution to balance production and demand in electricity.

Mr.P.Raja Pirian Assistant Professor/ ECE Introduce the special guest Dr.R.Vimalathithan Professor/ECE, Karpagam College of Engineering, Coimbatore. Dr.R.Vimalathithan delivered the Felicitation address.



Release of the softcopy of proceedings



Dr.S.Durairaj, Principal, Kings College of Engineering delivering Inaugural Address





Followed by keynote address, the papers were distributed to 2 oral sessions. Session-1 was conducted at Chera hall, Prof.T.Shanthi and Mrs.V.Filomin Joseena AP/ECE was the juries. And the session-2 was conducted at DSP lab, Mr.T.Jeyaseelan and Mrs.N.Mangayarkarasi was the juries.

After a tea break the valedictory session was started Dr.J.Arputha Vijaya Selvi HoD/ECE, delivered the summary of the National conference. Certificates were issued to the authors, those who were presented papers.Finally Mrs.N.Mangayarkarasi AP/ECE delivered the valedictory address and the session was end with National Anthem.







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2016 – 17

Circular

Date: 21.07.2016

This to inform that the ECE department has arranged a seminar on the title "Embedded Real Time Operating System and its applications" for the final year ECE students on 29th July 2016. All the final year students have to attend the seminar to enrich their knowledge in embedded system.

Resource Person:

Venue:

B. Jothi CRG Engineer (Core Research Group) Prolific Svstems & Technologies Pvt. Chennai

Pallava Hall

Time:

3.00p.m. - 4.30p.m.

Coordinators

(Mr.T.Jeyaseelan) (Mrs.P.Geethabai)

12116 HOD/ECE

(Dr.J.Arputha Vijaya Selvi)

IV A - W Newton. IV B - Sola







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year 2016 – 2017

REPORT

Seminar on - "Embedded Real Time Operating System and its applications"

Venue: Pallava Hall

Date: 29.07.2016

Department of Electronics and Communication Engineering has organized a seminar on **"Embedded Real Time Operating System and its applications"** for the final year ECE students of strength 124 on 29.07.2016 (Friday) at Pallava Hall @10.30 a.m. Mr.T.Jeyaseelan AP/ECE and Mrs.P.Geethabai AP/ECE has coordinate this event.



The event coordinators Mr.T.Jeyaseelan and Mrs.P.Geethabai with the Resource person Mr.Jothi,CRG Engineer,PROLIFIC on the Dias

The event was started at 10.30a.m. with the welcome address delivered by Mrs.P.Geethabai AP/ECE, followed by the introducing and honoring of the Resource person by Mr.T.Jeyaseelan AP/ECE. Then the session was handed over to the resource person.



Mr.T.Jeyaseelan introducing the Resource Person



Mr.T.Jeyaseelan honoring the Resource Person



Mr.T.Jeyaseelan honoring the Resource Person with the memento

Mr. B. Jothi, CRG Engineer, PROLIFIC, Chennai was the Resource person. He delivered lecture on microprocessor and microcontroller and their differences, on embedded system, on recent protocols in real time applications and their usages.



The Resource person Mr.Jothi on delivering the lecture

The session was very interacting and interesting for the students. The session came to an end at 12.30p.m. with the feedback delivered by the students.



Final year ECE students at the seminar

The event ended with the delivery of vote of thanks by Mrs.P.Geethabai, AP/ECE, Thanking the Management, Principal, Accounts Officer, Dean R&D/HOD-ECE for granting permission to conduct this event and providing SFRDS.

Coordinations (Mr.T. Injaseelan) (Mr.P. (teetRabai)

Contents:

- Problem Identification
- Planning the prerequisites
- Methodology for research
- Concepts of Validation
- Analysis of results and concluding remarks
- Overview of statistical analysis tools

Resource Persons:

Dr. A. Vasumathi, Assistant Professor, VIT Business School, Vellore.

Faculty of Kings College of Engineering.

Registration fees:

Spot registration is permitted. Scanned copy of the registration form must be sent through e-mail on/or before 20.02.2017. Registration Link: https://goo.gl/forms/6xHzGo5KL6ND7KVn1

IEEE Members	: Rs.200
Non IEEE Member	: Rs.300

The registration fee includes course material, lunch and refreshment.

Transport:

Participants can avail the transport facilities of the college.

Chief Patrons: Mr.T.R.S.Muthukumaar. MBA, Chief Executive Officer

Patron: Dr.S. Durairaj, B.E., M.E., Ph.D., PDF., Principal

Co-Patron: Dr.S.Sivakumar, B.E., M.Tech., Ph.D., Vice Principal

Convenor: Dr. J. Arputha Vijaya Selvi, B.E., M.E., Ph.D., Dean (R & D)

Coordinator: Mr. T. Pasupathi, M.E., (Ph.D)., AP/ECE - R&D

Mr. A. Herald, M.E., (Ph.D)., AP/ECE



Please mail your registration form to: The Coordinator, Workshop on Research Methodology & Statistical Tools for Research, R & D Section, Kings College of Engg., Punalkulam- 613303. Mobile : 04362 - 282474

For further information contact :Mr. T. Pasupathi- 98941 04645Mr. A. Herald- 94868 02587



NAAC Accredited Institution (Approved By AICTE, New Delhi & Affiliated to Anna University, Chennai)

> Workshop on Research Methodology & Statistical Tools for Research



Organised by

IEEE Student Branch and R & D Section Kings College of Engineering

On 25th February - 2017 *@* Kings College of Engineering Punalkulam - 613 303 website: www.kingsindia.net

About our Institution:

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About R & D Section:

Department The of Electronics & Communication, Electrical & Electronics Engineering and Mechanical Engineering are recognized as research centres for collaborative research by Anna University, Chennai. A significant number of projects funded by various government and non government funding sectors namely DRDO, MCIT, AICTE, New Delhi, TNSCST, Chennai, Analog Devices, USA and Texas Instruments, USA are successfully carried out. Faculty members are encouraged to participate in the faculty development programs, workshops and seminars organized by other institutions in their research area as a step towards strengthening their domain knowledge.

About the workshop:

The aim of this workshop is to provide an initiative towards the complex research methods, either pursuing or planning to initiate research in any area of engineering. The orientation of the workshop is aimed towards understanding research in multiple perspectives and helps the participants to acquaint with recent developments.

Eligibility:

The workshop is designed to cater to the needs of research scholars, final year UG/PG students and faculty members in engineering, science and management and allied fields pursuing or aspiring to do research.

Outcome:

The participants will get a hands-on-session and will learn how to carry out statistical data analysis using them. By the end of the programme they will be able to develop their conceptual clarity and practical knowledge to run the software for analysis and interpreting the data for their research.



Kings College of Engineering Punalkulam - 613 303 Workshop

on

"Research Methodology & Statistical Tools for Research"

Registration Form

Please fill this form and send it to us by email randd@kingsindia.net

1. Name (in block letters)	:	
2. Qualification	:	
3. Designation	:	

4. Institution / Organization :

5. Address for Communication :

6. Phone No. / Mobile

7. E-mail:

Signature of the applicant

Signature of the Head of the Department 123

KINGS COLLEGE OF ENGINEERING

Department of Electronics and Communication Engineering

IEEE STUDENTS BRANCH STB 16621

Workshop on "Research Methodology and Statistical Tools for Research"

IEEE Student Branch and **R & D section** organized a one day workshop on "Research Methodology and Statistical Tools for Research" on 25th February, 2017. Dr. J. Arputha Vijava Selvi, IEEE SBC & Dean (R & D) welcomed the gathering. Dr. A. Vasumathi, Professor & Programme Coordinator-MBA, VIT Business School, VIT University, Vellore delivered inaugural address. In her inaugural address, she briefed the three essentials for doing research: Hard work, Punctuality and Dedication. Also she stressed the importance of publishing the findings in reputed journals and research work should be time bound. Dr. A. Vasumathi, gave an introduction on using IBM SPSS for statistical analysis. A hands-onsession on using IBM Statistical Package for the Social Sciences (SPSS) for analyzing results obtained during experimentation was given. An empirical study on "The impact of Emotional Intelligence on Work Life Balance among the Faculty Members' Performance in the Educational Institutions, Tamil Nadu, India" was briefed. During the hands-on-session analysis, the above study was carried out using the questionnaire and datasets. During Session - II Dr. V. R. Sarma Dhulipala, Assistant Professor, AU BIT Campus, Trichy delivered lecture on "Research in Modern Era". In his lecture, he briefed about Systematic - research process, Logical - induction/deduction, Empirical - evidence based, Reductive generalisation and Replicable - methodology. During the session III Dr. V.R. Sarma Dhulipala Tiruchirappalli, delivered lecture on "Paper Writing: Nitty - Gritty". In his lecture, he briefed that the title of the paper should be catchy, conceptual and scientific. He stressed the importance in writing abstract of the article and choosing keywords. He discussed that result and analysis part should be graphically illustrated and not descriptive. Dr. V.R. Sarma Dhulipala presided over the valedictory function issued the certificates to the participants. Ms. E. Suganya, Asst.Prof, R&D proposed the vote of thanks. 14 delegates from other institutions and 13 internal participants attended the workshop. The workshop was concluded with National Anthem.



Dr. A. Vasumathi, Professor & Programme Coordinator-MBA, VIT Business School, VIT University, Vellore during the hands-on-session



Dr. V. R. Sarma Dhulipala, Assistant Professor, AU BIT Campus, Trichy delivering lecture

Reported by T.Pasupathi, AP/ECE Kings College of Engineering, Punalkulam, Pudukkottai Member ID: 90234387 vijayas_02@yahoo.co.in