# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
## Academic Year 2021 - 2022 / EVEN SEMESTER

## NATIONAL CONFERENCE ON COMMUNICATION, NETWORKING AND INTELLIGENCE– NCCNI'22 - REPORT

The Department of Electronics and Communication Engineering organized a National Conference on Communication, Networking and Intelligence – NCCNI'22 on **10th June 2022.**

### OBJECTIVE OF THE CONFERENCE

- The conference focuses on current research topics related to Communication, Networking and Intelligence.
- It would act as an innovative forum to share and exchange the innovative research ideas related to advanced inventive communication and Intelligence for Students, Professors, Researchers and Innovators.

### Conference Topics:

1. Digital Communication
2. Communication System Design
3. Artificial Intelligence and Robotics
4. Neural Networks
5. Antenna System and Design
6. RF and Microwave Communications
7. Wireless Communication
8. Cognitive Radio and Networks
9. Mobile Adhoc and Wireless Sensor Networks
10. Optical Networks and Systems
11. Embedded System Design
12. Digital System Design
13. VLSI Design
14. Soft Computing Techniques and application

National Conference on Communication, Networking and Intelligence (NCCNI'22) was organized on 10th June, 2022. **Dr. Joe Louis Paul,** Assistant Professor, SSN College of Engineering, Chennai was the chief guest. Mrs.N.Mangaiyarkarasi, Head of the Department, Department of Electronics and Communication Engineering delivered the welcome address and briefed on the recent trends and usage of Communication, Networking and Intelligence in various areas of applications.

**Mr.T.Pasupathi, AP/ECE** organizing secretary introduced the Chief Guest. The Chief Guest released the conference proceedings. **Dr. Joe Louis Paul** delivered the inaugural address on **Living and Computing on the Edge – An Overview of Federated Learning**. During his talk, he shared information about the challenges and advancements related to engineering fields, which will create an opportunity to focus on specific areas from their own perspective and experiences in this field.

He explained the concept of Federated Learning which is a machine learning approach that trains models collaboratively and aims to prevent data leakage by using differential privacy and decentralized data. Federated Learning also allows an individual's data to remain anonymous while helping build powerful models Also he explained about the recent trends, growth, future scope, ongoing projects and research in the field of Engineering. At the end of inaugural function, he thanked the management, Secretary, Principal, Vice Principal, Chief Guest, HOD, staff members and participants.

The technical session started at 11.30 am in both online and offline mode. Mr.T.Jayaseelan, AP/ECE, Mr.P.Rajapirian, AP/ECE acted as a Jury for the presentation. The evaluation was based on the presentation, concept and implementation and the answers given to the queries. After the technical session, the participants shared their feedback about the conference. Certificates were distributed to the participants.

**CONFERENCE COORDINATORS**                    **HOD/ECE**                    **PRINCIPAL**
**Mr.T.Pasupathi**

# CONFERENCE POSTER

## NAAC Accredited Institution
# KINGS
COLLEGE OF ENGINEERING

Recognized under 2(f) & 12(B) of UGC
Approved By AICTE, New Delhi & Affiliated to Anna University, Chennai
PunalKulam, Gandarvakottai (tk), Near Thanjavur, Pudukkottai - 613303

## National Conference on Communication, Networking & Intelligence (NCCNI'22)

### 10-06-2022
Jointly organised by
**Department of Electronics & Communication Engineering**
and

◆ **IEEE**  Madras Section
STB 16621

### Advisory Committee
Dr. S. Raghavan, HAG, NIT, Trichy
Dr. N. Sivakumaran, NIT, Trichy
Dr. P. Muthuchidambaranathan, NIT, Trichy
Dr. A. Sivanandharaja, ACCET, Karaikudi
Dr.S.Krishnakumar, DRDO, Chennai
Dr S Suganthi, Christ University, Bangalore
Dr.D Jayanthi, GRIET, Hyderabad
Dr. D. Kumar, PMIST, Thanjavur

### Technical Committee
Dr. K. Prabu, NIT, Surathkal
Dr. M. Aramudhan, PKIET, Karaikal
Dr.T.Jayasankar, AUBIT, Trichy
Dr. V. Sakthivel, NIT, Calicut
Dr.R.Vimalathithan, KCE, Coimbatore
Dr. C Vennila, SCE, Trichy
Dr.S.Albert Alexander, KEC, Perundurai
Dr. J. Baskaran, KEC, Kuppam
Dr. M. Malathy, Veltech Hightech EC, Chennai
Dr. Robinson, MZCET, Pudukkottai

### Organizing Committee
*Chief Patron*
**Dr. R. Rajendran**, Secretary, KCE
**Shri. T.R.S. Muthukumaar**, CEO, KCE

*Patron*
**Dr. J. Arputha Vijaya Selvi**, Principal, KCE

*Co-Patron*
**Dr. S. Sivakumar**, Vice Principal, KCE

*Conference Chair*
**Mrs. N. Mangaiyarkarasi**, HOD/ECE, KCE

*Organizing Secretaries*
**Mr.T. Pasupathi**, AP/ECE, KCE
**Mr. S. Sivakumar**, AP/ECE, KCE

### Conference Topics: (but not limited to)
1. Digital Communication
2. Ad Hoc / Sensor Networks
3. Artificial Intelligence and Robotics
4. Neural Networks
5. Biomedical Imaging
6. RF/ Microwave / Antenna Design
7. Low Power VLSI/VLSI Testing
8. Cognitive Radio and Networks
9. Mobile Adhoc and Wireless Sensor Networks
10. Optical Networks and Systems
11. Embedded System Design
12. Soft Computing Techniques and application
13. Mobile/ Satellite Communications

### For Further Information Contact:
The Coordinator - NCCNI'22
Department of ECE,
Kings College of Engineering
Punalkulam, Gandarvakkotai (tk)
Pudukkottai District

📞 98941 04645, 75503 58645
✉ ncec22@gmail.com
📍 Thanjavur - Pudukkottai Highway
🌐 www.kingsengg.edu.in

## About the College
Kings College of Engineering (KCE) is an institution which was formed with the single aim of providing quality education to the poor and under-privileged students of this region. KCE was established in the year 2001 and run by Raj Educational Trust (RET). KCE is approved by All India Council of Technical Education, New Delhi (AICTE) and is affiliated to Anna University, Chennai. Our institution offers 5 U.G Programmes and 4 P.G Programmes. The college maintains high standard of education by providing a wide array of world class academic facilities, employing highly qualified and experienced faculty members and creating an ambience conducive of quality education.

## 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 non-government organizations viz. DRDO, MCIT, AICTE New Delhi, TNSCST, Chennai and Texas Instruments USA have been successfully carried out.

## About the Conference
This Conference offers a forum for the exchange of scientific and technical Innovative concepts and new ideas in the areas of Communication, Networking and Intelligence. Also it promotes an affable environment facilitating academicians, industry experts and scholars to exchange their research ideas for collaborative work. Original research papers are invited.

### Important Dates:
Submission of Full paper : 03-06-22
Date of Acceptance : 06-06-22
Last date of Registration. : 08-06-22

### Registration Fee :
UG/PG Students : Rs. 500/-
Faculty members /
Research scholars : Rs. 750/-

### Author Guidelines:
Authors are requested to submit original and unpublished camera ready paper in IEEE format not exceeding 6 pages to ncec22@kingsengg.edu.in.
All selected papers will be included in the proceedings of the conference with ISBN.

### Registration Form

Name :
Degree :
Department :
Institution :
Institution Address :


email ID :
Mobile Number :
Registration Fee :
Payment Details :
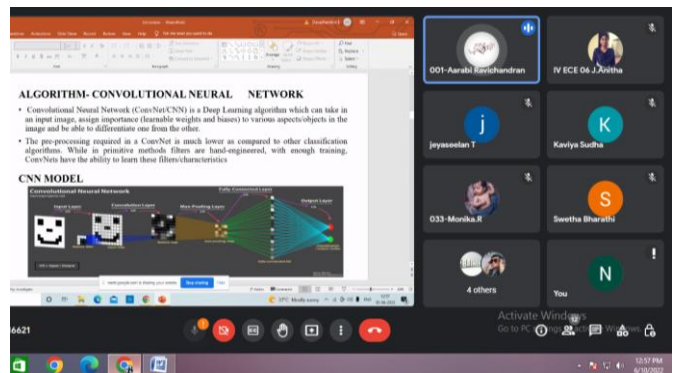
Signature of the Candidate
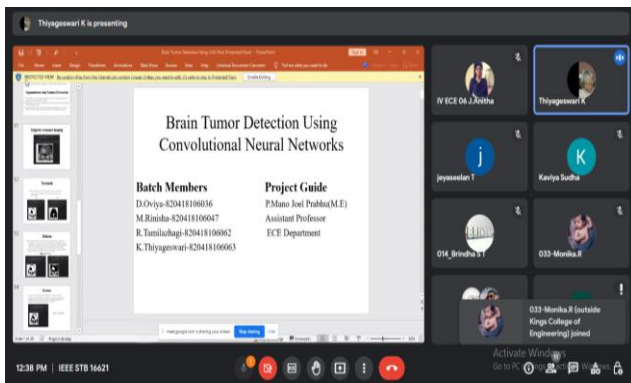
Declaration

Mr. /Ms. / Dr. .......................................................

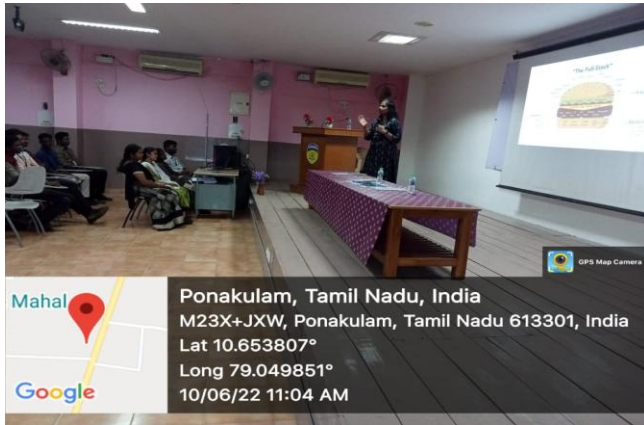of ...........................................................................

our institution is sponsored for the

programme

Signature of HOD/Principal

# ANNEXURE – III

# GLIMPSES OF THE EVENT









**Students' presentation in online/offline mode**

A NAAC Accredited Institution

**KINGS**
COLLEGE OF ENGINEERING
Recognized under 2(f) & 12(B) of UGC
Approved by AICTE, New Delhi
Affiliated to Anna University, Chennai

TÜVRheinland®
CERT
ISO 9001

# Department of Electronics and Communication Engineering
## National Conference on Communication, Networking and Intelligence (NCCNI-2022)
### Registered Papers

**Session:01**                                                 **Date: 10.06.2022**

**Mode: Online**

| S.No | Name of the Participant(s) | Name of the College | Title of the Paper: | Time | Presentation Link |
|---|---|---|---|---|---|
| 1. | D.Rahul , R.Rajesh Kannan , J.Mohamed Shahil , A.Ajmaludeen | Anjalai Ammal Mahalingam Engineering College, Kovilvenni | Simulation And Modeling of The Electric Vehicle | 11.00 a.m-11.12 a.m | https://meet.google.com/vjr-miyf-zws |
| 2. | S.Surya,R.Rajasakthivelan,S.Vijay,P.Rajeshkumar | Anjaliammall Mahalingam Engineering College Kovilvenni,Thiruvarur | IOT based smart grid integrated solar power system | 11.13 a.m-11.25 a.m | |
| 3. | Karthikeyan.M ,Guruvenkatesh.N, Aravind.P , Prasanna.K | Anjalai Ammal Mahalingam Engineering College, Kovilvenni | A Novel SSIN Based Boost Converter For Low Voltage DC Source Integration | 11.26 a.m-11.42 a.m | |
| 4. | S.R.Yogamalini, Rasi.A.Prakashika | Parisutham Institute of Technology And Science, Thanjavur | IOT based temperature monitoring system for pharmaceutical company | 11.43 a.m-11.57 a.m | |
| 5. | Aarabi Ravichandran, Brindha. S. T, Devadharshini. E, Bhavanisha. S | Anjalai Ammal Mahalingam Engineering College-Kovilvenni | Incidence of fatal pedestrian collision avoidance and vechile speed control | 11.58 a.m-12.12 p.m | |
| 6. | Rinisha.M, Thiyageswari.K Oviya .D, Tamilazhagi .R | Anjalai Ammal Mahalingam Engineering College, Kovilvenni Thiruvarur | Brain tumor detection using CNN | 12.12 p.m-12.26 p.m | |
| 7. | R. Balasubramaniyan, B. Sakthivel, K. Ragul, V. Balamurugan | Anjalai Ammal Mahalingam Engineering College, Kovilvenii | RadiologistAPI for Respiratory Disease Classification and Grade Prediction using Deep Learning Model | 12.27 p.m-12.41 p.m | https://meet.google.com/vjr-miyf-zws |
| 8. | N.Farhana Sirin, K.Iswarya, R.Monika, A.Lavanya | Anjalai Ammal Mahalingam Engineering College, Kovilvenii | Heart failure prognosis using Support vector machine | 12.42-12.54p.m | |

## Department of Electronics and Communication Engineering
## National Conference on Communication, Networking and Intelligence (NCCNI-2022)
## Registered Papers

**Session:02**                                                          **Date: 10.06.2022**
**Mode: Online**

| S.No | Name of the Participant(s) | Name of the College | Title of the Paper: | Time | Presentation Link |
|------|---------------------------|---------------------|---------------------|------|-------------------|
| 1. | A.Shahira, P.Sivaranjani, M.R.Saraswathi | Anjalai Ammal Mahalingam Engineering, Kovilvenni, | Detection of Aluminium Scraps using Image Processing for Production of H2 | 11.00 a.m-11.12 a.m | |
| 2. | Jayabharathi. S, Harivardhini. S, Shakithiya.K, Familarufi. S | Anjalai Ammal Mahalingam Engineering College, Kovilvenni. Thiruvarur. | Crop recommendation system using Machine learning | 11.13 a.m-11.25 a.m | |
| 3. | Mahalakshmi.R,Mathumitha.A | Parisutham Institute of Technology And Science, Thanjavur | Nanobots | 11.26 a.m-11.42 a.m | |
| 4. | Solangkili.K , Reethiga.V.E, Shaheen Begum.A ,Ilakkiya.N ,Jaya.S | Arasu Engineering College,Kumbakonam | Bot for health care and diagnosis | 11.43 a.m-11.57 a.m | |
| 5. | P.L Ambiga , S.Asmitha | Parisutham Institute Of Technology And Science, Thanjavur | Lifi technology | 11.58 a.m-12.12 p.m | https://meet.google.com/rcv-ewtn-jdo |
| 6. | R. Raaghul, K. Swedha Bharathi R. Hinduja | Analysis of transient and Voltage stability enhancement | Parisutham Institute Of Technology And Science, Thanjavur | 12.13-12.27 p.m | https://meet.google.com/rcv-ewtn-jdo |

**INVITATION**

NAAC Accredited Institution

**KINGS**
**COLLEGE OF ENGINEERING**

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

Approved By AICTE, New Delhi & Affiliated to Anna University, Chennai

Punalkulam, Gandarvakottai (tk), Near Thanjavur, Pudukkottai - 613303

**IEEE**
MADRAS SECTION
STB16621

# National Conference on
# Communication, Networking and Intelligence
## Organized by
## Department of Electronics and Communication Engineering



**Dr. I. Joe Louis Paul**
**Associate Professor**
**Department of Information Technology**
**SSN College of Engineering**
**Chennai**

10.06.2022 Friday
09:45 a.m. - 10:30 a.m.
ECE Smart Classroom

**Organizing Secretaries**
Mr.T. Pasupathi, AP/ECE   Mr. S. Sivakumar, AP/ECE

**Conference Chair**                         **Patron**
Mrs. N. Mangaiyarkarasi        Dr. J. Arputha Vijaya Selvi
HOD/ECE                                          Principal

## All are Invited

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

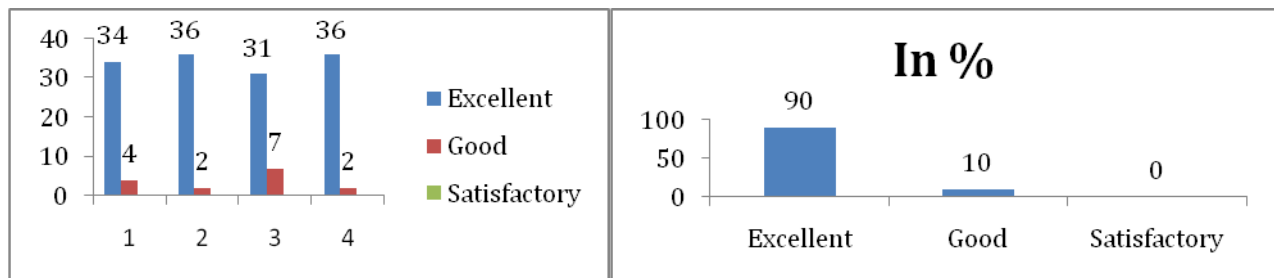**National Conference on Communication, Networking and Intelligence (NCCNI'22)**

**_AGENDA_**

**Date: 10.06.2022**                                           **Venue: Virtual Mode**

| | | |
|---|---|---|
| 10.00 – 10.10 | Welcome Address | *Mrs.N.Mangaiyarkarasi* |
| | | HoD, KCE. |
| 10.11 – 10.16 | Presidential Address | *Dr.J.Arputha Vijaya Selvi* |
| | | Principal, KCE. |
| 10.21 – 10.23 | Introduction to Chief Guest | *Mr.T.Pasupathi* |
| | | Asst.Prof/ECE, KCE. |
| 10.24 – 11.10 | Key note speaker | *Dr.I.Joe Louis Paul*, Associate Professor |
| | | Department of Information Technology |
| | | SSN College of Engineering |
| | | Chennai, Tamil Nadu. |
| 11.11 – 11.15 | Vote of Thanks | *Mr.S.Sivakumar* |
| | | Asst.Prof, KCE. |
| 11.20 – 01.00 | Session – starts | Participants |

# FEEDBACK ANALYSIS

| Q.NO | Excellent | Good | Satisfactory |
|------|-----------|------|--------------|
| 1 | 34 | 04 | 0 |
| 2 | 36 | 02 | 0 |
| 3 | 31 | 07 | 0 |
| 4 | 36 | 02 | 0 |
| Total | 137 | 15 | 0 |
| In % | 90 | 10 | 0 |



**Overall Analysis**

## Resource Person-Profile

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

Email: joelouisi@ssn.edu.in

**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.

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 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, etc.,

His current research areas of interest include Error Control Coding, Wireless Communication and Internet of Things (IoT). He has guided about 63 UG projects and 14 PG projects so far

Received 3 best paper awards for his research papers presented in IEEE sponsored International conferences.
Received best poster award in International Conference organized by Department of IST, College of Engineering, Guindy, Anna University, Chennai.
Received best project award in the International Conference organized by Department of CSE, SSN College of Engineering, Chennai.
**Journal Publications: 08**
**Conference Publications: 15**