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

A REPORT

ON

LIVE ONLINE WEBINAR TITLED

"COMMUNICATION TECHNOLOGIES AND ITS REAL TIME APPLICATIONS USING EDGE COMPUTING TECHNOLOGIES"

ON

09th APRIL 2024

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)

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A Glimpse on the Background of Webinar:

In KCE, Department of Electronics and Communication Engineering, has organized an online Webinar Titled **"Communication Technologies and its Real Time Applications Using Edge Computing Technologies"** on 09th April 2024 from 10.30 a.m to 12.00 p.m.

The main objective of this Webinar is to have some knowledge about the various communication technologies, major communication protocols and its real time applications etc .

Under the guidance of our Principal, Dr. J. Arputha Vijaya Selvi, we hosted this Webinar.
Dr.T.Shanthi, HOD/ECE was the convener of our webinar. Mrs.D.Vennila, AP/ECE was the program coordinator.

OVERVIEW OF THE WEBINAR:
ABOUT THE RESOURCE PERSON:

The resource person for the webinar was **Dr. Vaddi Naga Padma Prasuna,** Associate Professor, Atria Institute of Technology, Bangalore.

ABOUT THE REGISTRATION PROCESS:

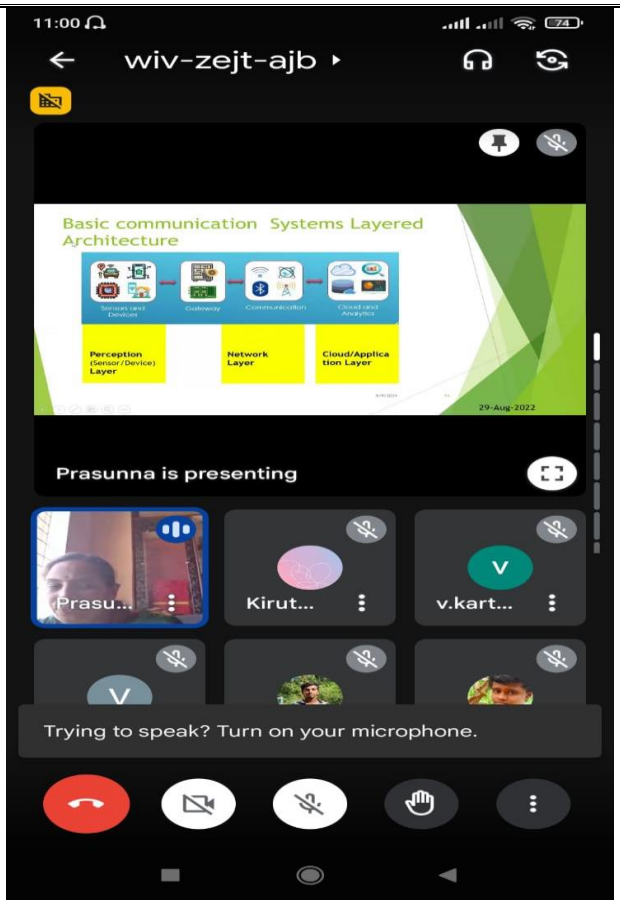
The webinar was planned to conduct via Google meet platform. The registration link was created through Google forms and the link was posted in Whats app group.
Registration Link: https://tinyurl.com/commutech

ABOUT THE WEBINAR:

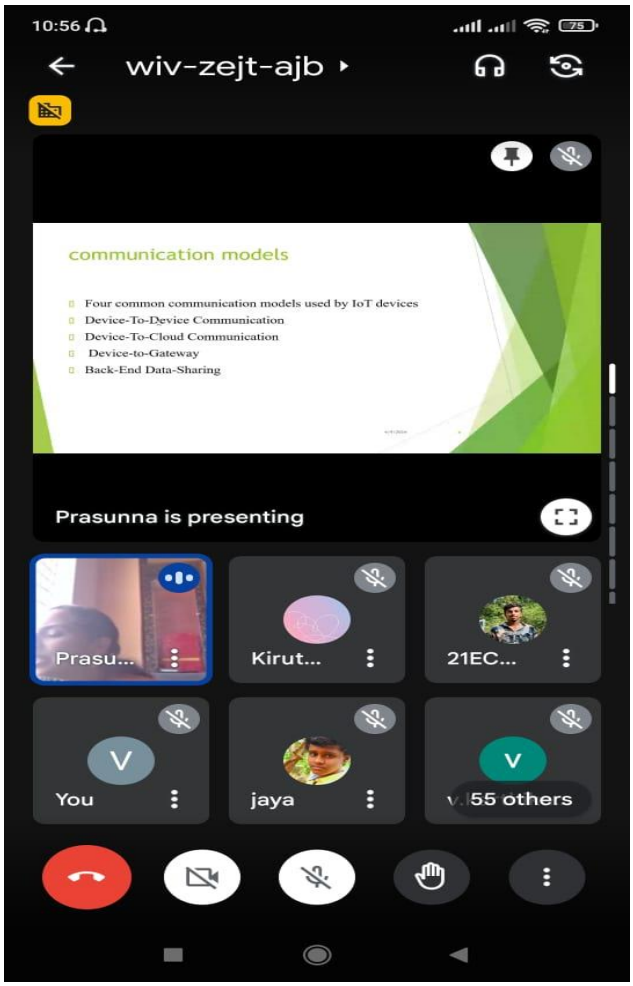
The webinar was started at 10.30 a.m with 91 participants. Ms. D. Kiruthika, Student of II ECE, welcomed the resource person and the participants by the words. Mrs. D.Vennila, AP/ECE coordinator of this webinar gave the Introduction about the Resource person. Then the session was handed over to the Resource person. She gave very clear explanation about the Title of the Webinar "Communication Technologies and its real time applications"

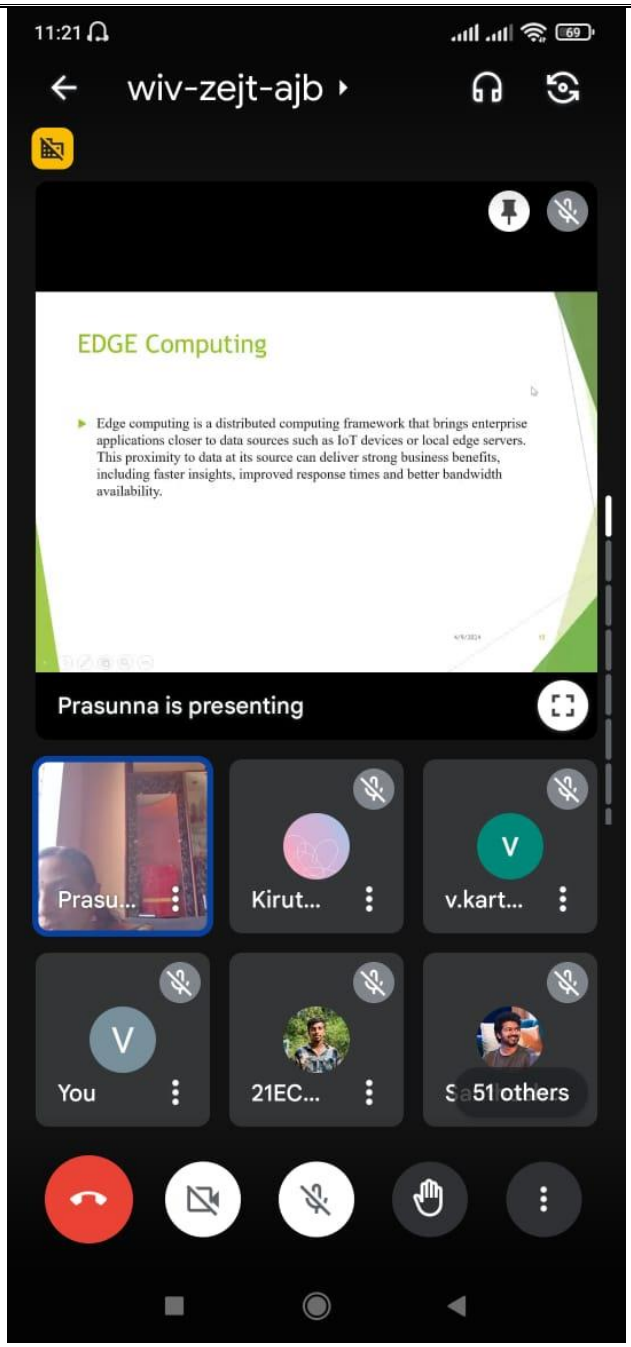
In her lecture, she explained about the various communication Technologies, The layered architecture of communication, Major communication protocols available, Edge computing technologies, Edge computing in real time applications etc. She emphasized about the evolution of mobile networks and their characteristics.

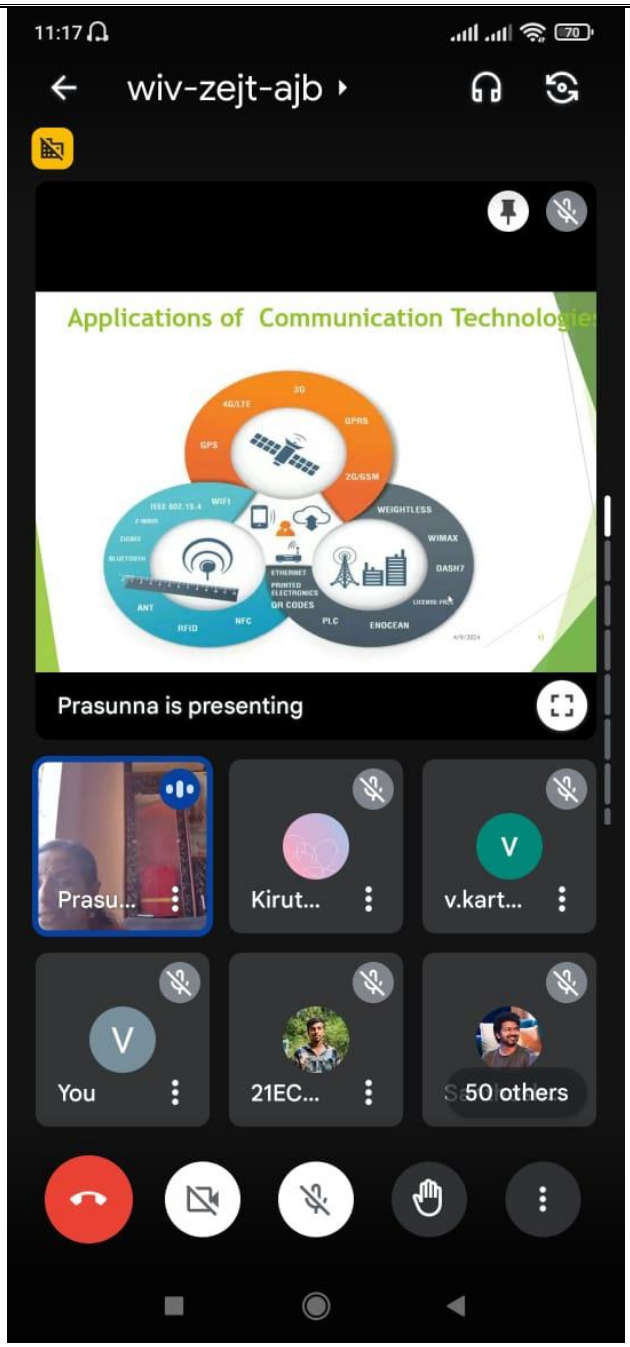
10:38
wiv-zejt-ajb
Communication Technologies and its real time Applications using Edge Computing Technologies
Dr. VADDI NAGA PADMA PRASUNA
Assoc. Professor
Prasunna is presenting
Prasu...
Kirut...
jaya
You
Sant...
37 others


11:00
wiv-zejt-ajb
Basic communication Systems Layered Architecture
Perception (Sensor/Device) Layer
Network Layer
Cloud/Application Layer
29-Aug-2022
Prasunna is presenting
Prasu...
Kirut...
v.kart...
Trying to speak? Turn on your microphone.

wiv-zejt-ajb
The evolution of mobile networks and their technical characteristics
Prasunna is presenting
Prasu...
Kirut...
21EC...
You
jaya
46 others


10:56
wiv-zejt-ajb
communication models
Four common communication models used by IoT devices
Device-To-Device Communication
Device-To-Cloud Communication
Device-to-Gateway
Back-End Data-Sharing
Prasunna is presenting
Prasu...
Kirut...
21EC...
You
jaya
55 others





Snapshots of the webinar during the lecture of Dr. V N P Prasuna

She also explained about the evolution of mobile networks and their technical characteristics.

1G – Developed in 1980, No data transmission, No impact on Industrial Applications

2G – Developed in 1991, Upto 40 Kbps, Text messages from and to remote machines.

3G - Developed in 2001, Upto 20 Mbps, Video monitoring, Remote conditioning monitoring.

4G - Developed in 2010, Upto 1 Gbps, Wireless Environment Network, Services via smart phones.

5G - Developed in 2020, Upto 20 Gbps, Autonomous Logistics, Real time Data Analytics.

The top 7 technical skills in 5G technologies are:

- Network design and architecture

- Wireless communication technologies
- Network security
- Project management
- System Integration
- Software development and programming languages
- Data analysis and management

The four common communication models used by IoT devices are:

1. Device to Device Communication
2. Device to Cloud Communication
3. Device to Gateway
4. Back End Data Sharing

The Advanced applications of Communication technologies are:

- The Rise of 5G technology, Edge Computing, Manufacturing and Health care, Connected Smart cars and Smart cities etc.

She gave the overview about the Basic communication systems: Layered architecture, Layered architecture protocols and the various protocols comparison.

Finally she discussed about the Edge computing technologies.

At 12.00 p.m 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 12.15 p.m we have posted the Feedback link Via the chat box.

Feedback Link: https://forms.gle/sM3MWGLXPZQ1oASa7

Finally, Mrs. D.Vennila, AP/ECE coordinator of this webinar gave the vote of thanks with words.

Thus the program ended successfully.

OUTCOME:

- All the second and third year ECE students have attended the session.
- Students gained some knowledge about the communication technologies and its real time applications. Also they have understood about the communication protocols and the edge computing technologies.
- E-Certificate was provided to all the participants through their E-mail.

D. Vennila 12/4/24

Co coordinator

12/4/24

HOD/ECE

H.O.D.
ELECTRONICS AND COMMUNICATION ENGINEERING
KINGS COLLEGE OF ENGINEERING
PUNALKULAM - 613 303.
GANDARVAKOTTAI TALUK, PUDUKOTTAI DISTRICT

J. Principal 12/4/2024

Principal

PRINCIPAL
Kings College of Engineering
PUNALKULAM - 613 303

Annexure: I

BROCHURE

Annexure: II

Registration Form

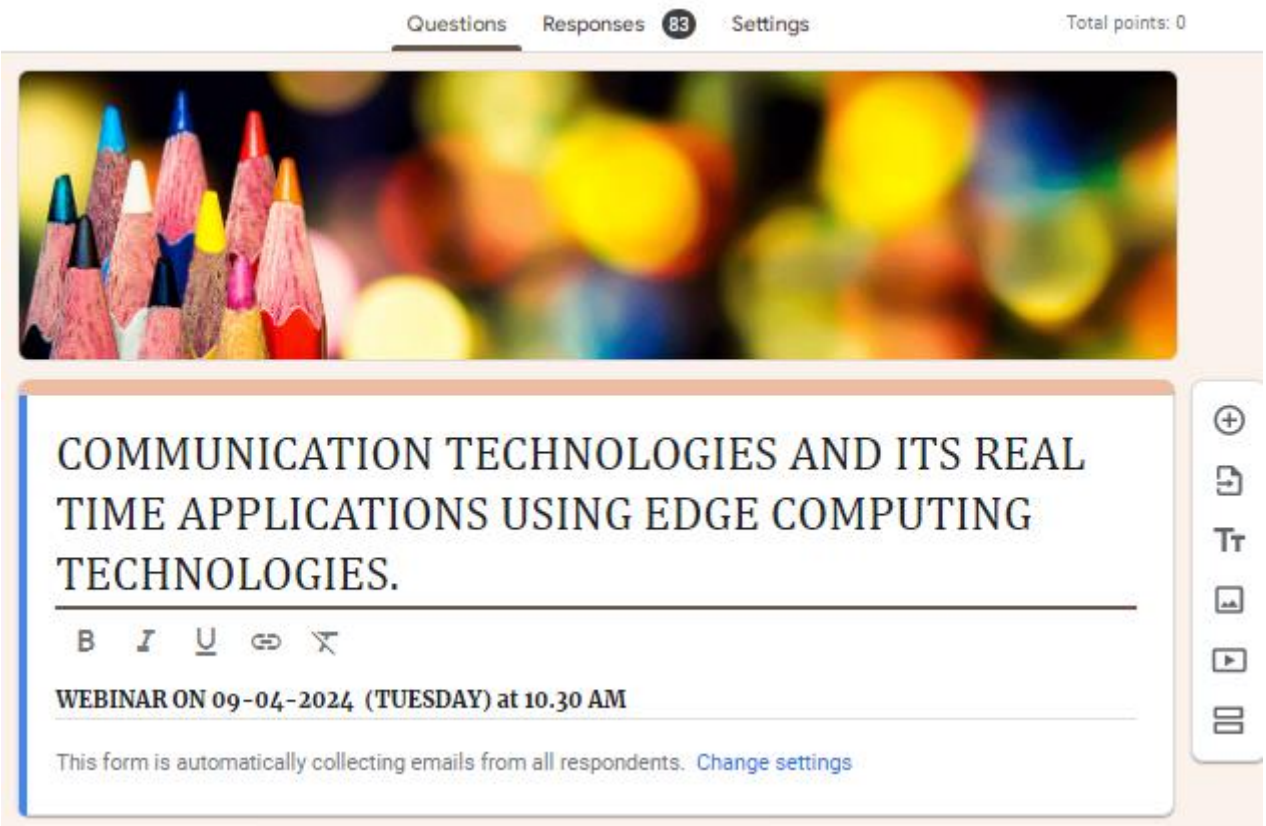
Registration Form - Webinar on "Communication Technologies"

Organized by Department of ECE, Kings College of Engineering, Punalkulam, Pudukkottai.

COMMUNICATION TECHNOLOGIES

Annexure: III

Feedback Form

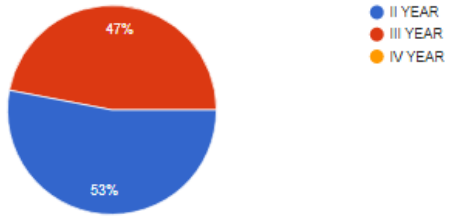


Annexure: IV

Feedback Response

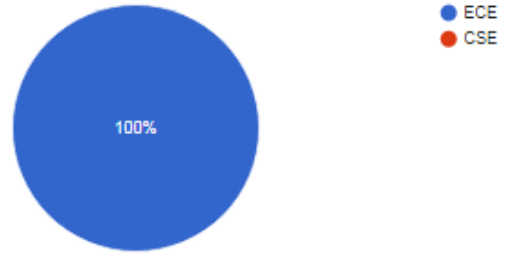
Year of Study

83 responses



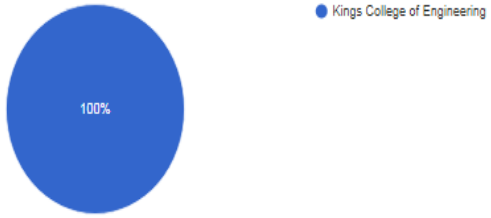
Department

83 responses



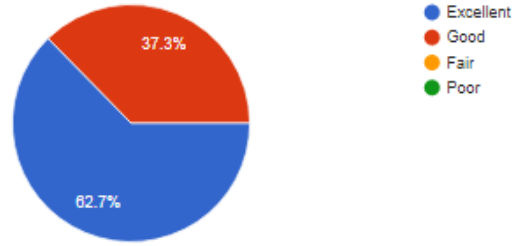
Name of the College

83 responses



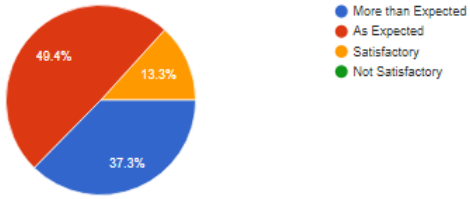
What is your level of satisfaction of this Guest Lecture?

83 responses



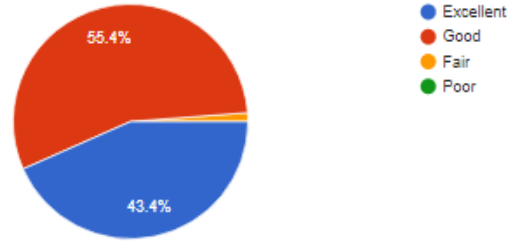
Content and Delivery of this Guest Lecture?

83 responses



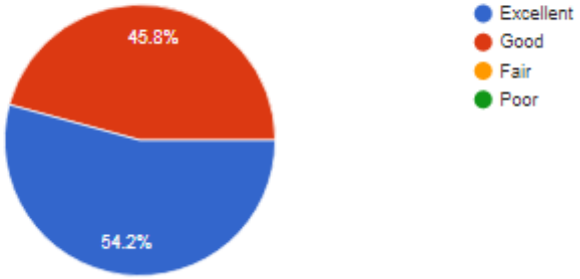
Audio / Video quality

83 responses



Overall, How would you rate this Event?

83 responses



Annexure: V

Resource Person Profile

Dr. Vaddi Naga Padma Prasuna,

Associate Professor, Atria Institute of Technology, Bangalore.

She is having 16 years of teaching experience in the fields of wired and wireless Networks, IoT, ICT technologies. She acquired her M.Tech in VLSI & Embedded systems with distinction from V.T.U in 2008. She was awarded her PhD from Anna University in 2018.
Her areas of interest include WSN, Reconfigurable systems, Industrial IoT, 4G, and 5G networks.
She conducted many Faculty Development programs and Student Development Programs in Atria Institute of Technology, and SDPs in other colleges.
Delivered talks in different colleges.

Achievements:
Currently serving as Secretary 2024, WiE AG Bangalore Section, WiE Execom member Bangalore Section 2023, WiE Affinity group Advisor SB AIT since 2021, Recognized as VTU research supervisor from 2021.

Awards received:
Received Outstanding WIE Volunteer 2023 award from IEEE Bangalore section
Received Outstaying Brach WIE Student 2023 award from IEEE WIE Bangalore section
Received research incentives from Honorable Register of VTU June 2023

Research/Publications:

Recognized VTU supervisor, Guiding few scholars, 31research Publications, Published One Book Chapter, 4 – Patents, Proposals submitted to VGST, AICTE, ISRO, 6G Bell labs, Received KCST Funded project 2022-23

Memberships, Outreach Activities:
IEEE Member – 97237912, IEEE Bengaluru Section WIE 2023 – serving as EXECOM member, IETE Fellow Member, IANG Member -281080, ISTE Life Member -13267, served as a resource person for prestigious colleges and IEEE events/ workshops/SDPs.

Annexure: VI

Sample Certificates

IEEE MADRAS Section

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B++ NAAC

Certificate of Participation

This is Certify that **P ENIYARASI**

of Kings College of Engineering has actively participated in webinar session on "**Communication Technologies and its real time Applications using Edge Computing Technologies**" Organized by Department of ECE and IEEE Student Branch of Kings college of Engineering , Punalkulam on 09th April , 2024

Mrs . D . Vennila	Dr . T . Shanthi	Dr. J . Arputha Vijaya Selvi
Coordinator	**Convener , HOD / ECE**	**Principal , KCE , Punalkulam**