



PANIMALAR INSTITUTE
OF TECHNOLOGY



EASWARI
ENGINEERING COLLEGE



SRI VENKATESWARA COLLEGE
OF ENGINEERING



JEPPIAAR INSTITUTE
OF TECHNOLOGY



VEL TECH MULTI TECH
ENGINEERING COLLEGE



IETE CHENNAI CENTRE

PRESENTS

FREE WEBINAR

ON

A PERSPECTIVE ON 5G COMMUNICATION



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of IITD, IITB, IITK)

Dr.S.KRITHIGA

**A.P.(ECE),SRMIST
KATTANKULATHUR**



**12.11.2020
THURSDAY**



**6.00 PM - 7.00 PM
IST**



REGISTRATION LINK : <https://forms.gle/GH7Tfx3aNTFcaDCn6>

GOOGLE MEET LINK : <https://meet.google.com/kpu-vter-zbb>

E-CERTIFICATE WILL BE PROVIDED

ISF SVCE

REPORT –WEBINAR #16

A PERSPECTIVE ON 5G COMMUNICATION

Dr.S.KRITHIGA

12/11/2020

The report is generated for the IETE Webinar series, Webinar #16, Conducted by IETE Chennai, in collaboration with ISF of SVCE and other colleges.



REPORT ON WEBINAR SERIES #16 ON “A PERSPECTIVE ON 5G COMMUNICATION” CONDUCTED BY IETE CHENNAI CENTRE

The Webinar was coordinated by **SVCE-ISF** in association with **ISF of**

1. Jeppiaar Institute of Technology,
2. Veltech Multitech Engineering College,
3. SRM Easwari Engineering College,
4. Panimalar Institute of Technology,
5. SRM Institute of Science and Technology.

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY VADAPALANI

PANIMALAR INSTITUTE OF TECHNOLOGY

EASWARI ENGINEERING COLLEGE

SRI VENKATESWARA COLLEGE OF ENGINEERING

JEPPIAAR INSTITUTE OF TECHNOLOGY

VEL TECH MULTI TECH ENGINEERING COLLEGE

IETE CHENNAI CENTRE
PRESENTS
FREE WEBINAR
ON
A PERSPECTIVE ON 5G COMMUNICATION

Dr.S.KRITHIGA
A.P.(ECE),SRMIST
KATTANKULATHUR

12.11.2020
THURSDAY

6.00 PM - 7.00 PM
IST

REGISTRATION LINK : <https://forms.gle/GH7Tfx3aNTFcaDCn6>
GOOGLE MEET LINK : <https://meet.google.com/kpu-vter-zbb>

E-CERTIFICATE WILL BE PROVIDED

FLYER ON THE WEBINAR SERIES #16 BY IETE CHENNAI CENTRE

The technical talk was delivered by **Dr.S.Krithiga** on **12/11/2020** from **6:00pm to 7:00pm**. 65+ students actively participated in the webinar.

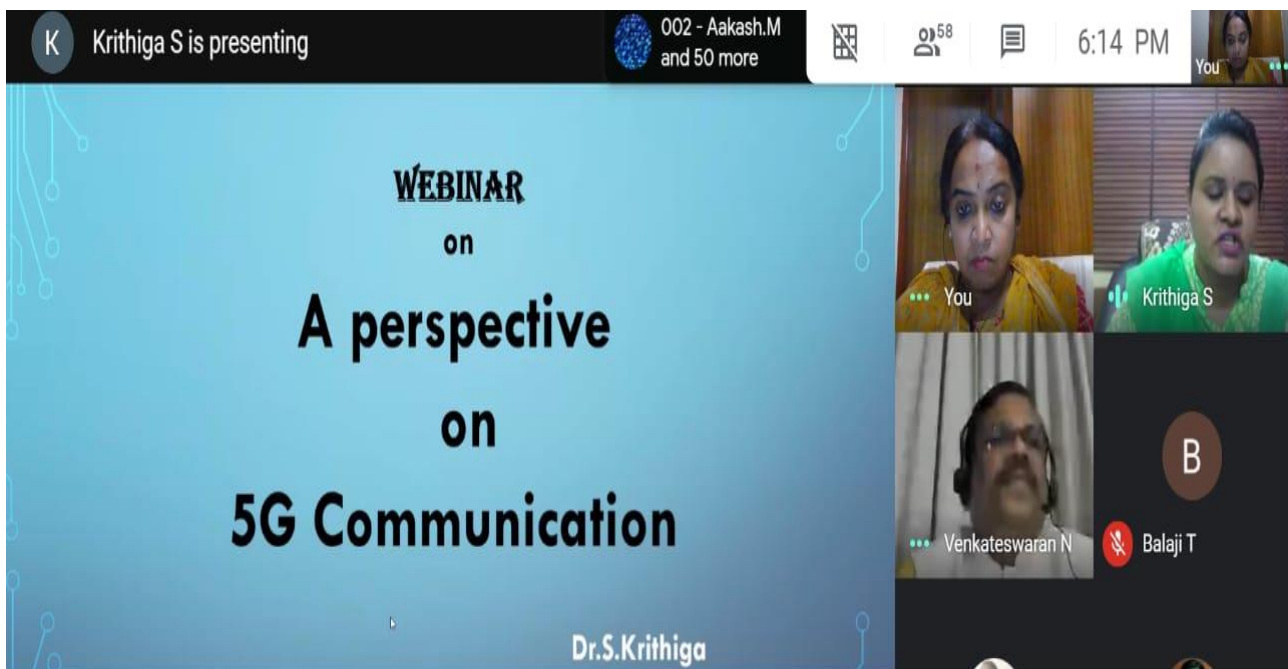
Speaker introduction

Dr.S.Krithiga received her Bachelor of Engineering in ECE from Periyar Maniammai College of Technology for Women in 2001. She completed her masters in Communication Engineering in VIT
IETE STUDENT FORUM SVCE

University in 2008. She was awarded with Ph.D in the field of wireless communication by SRM Institute of Science and Technology, Kattankulathur in Jan 2019. Currently, she is an Assistant Professor in the Department of Electronics and Communication Engineering at SRM, Kattankulathur. Her research interests include Wireless MIMO, OFDM, Digital Image Processing and Internet of things. She has got many international level journal publications under SCI and scopus indexing. She is currently guiding her research scholars in the areas of IoT and deep learning techniques.

Mr.Venkateswaran, Chairman IETE Chennai addressed the gathering and welcomed the participants.

The Session progressed with the expert talk by Dr.S.Krithiga. She delivered a detailed outlook on the topic “A perspective on 5G Communication”.



Some of the Key points discussed in the webinar were:

The Speaker commenced with the history of communication and the differences among the features of 1G, 2G, 3G, 4G and 5G. She explained about the access systems and core networks used in different generation technology. We got a clearer insight on the data rate and latency of the communication networks. She detailed us with the applications of the different generation technologies. The speaker talked about the standards and the frequency range in each of the communication networks. She filled us in with all the opportunities for the 5th Generation of communication technology.

5G Standards

FR1 Frequency Range 1 (< 6 GHz)

maximum channel bandwidth 100 MHz

Widely used range 3.3–4.2 GHz

FR2 Frequency Range 2 (> 24 GHz)

minimum channel bandwidth 50 MHz

maximum channel bandwidth 400 MHz

FR2 coverage

not capable of traveling large distances (a few hundred meters)

The session was very informative and enlightening. All the participants were captured by the knowledge portrayed by the chief guest speaker. The chief guest speaker was also keen on the “Q&A” session and answered the active queries put forth by the participants.

K Krithiga S is presenting Monisha Valli M.V. and 53 more

6:17 PM

Overview of Generations

Generation	Deployment	Standard	Services	Technology	Switching	Core Network	Data rate
1G	1970	AMPS	Only Voice	Analog	Circuit switching	PSTN	2 Kbps
2G	1990	GSM	Digital voice Short messaging	GPRS	Circuit switching	PSTN	14-64 Kbps
2.5G	1995	GSM	Digital voice, Short messaging	GPRS EDGE	Circuit switching Packet switching	PSTN Internet	14-64 Kbps
3G	1998	IMT 2000 - UMTS CDMA 2000	Integrated High quality audio, video and data	HSPA	Packet switching	GSM	2 Mbps
3.5G	2006	IMT 2000 - UMTS CDMA 2000 HSDPA	High speed voice/data	HSDPA evolved HSPA	Packet switching	GSM TDMA	14.4 Mbps
4G	2010	LTE	Packet information access, wearable devices	LTE-TDD LTE-FDD Mobile WIMAX	packet switching	Internet	100 Mbps

The session concluded with a “Vote of Thanks” delivered by **Mr. Maurya V, SVCE-ISF Chairman.**

SVCE-ISF team comprising of :

Chief Patron- Dr.S.Ganesh Vaidyanathan,Principal, SVCE,

Convener- Dr.S.Muthukumar, Professor, HOD, ECE,

SVCE-ISF coordinator-Ms.T.J.Jeyaprabha,

Chairman-Mr.Maurya Vijayaramachandran,(IV Year ECE),

Vice President-Mr.Jailesh Perumal,(IV Year ECE),

Honorary Secretary-Mr.R.Vishnusai(III Year ECE),

Joint Secretary-Ms.Indhumathi Vijayarangan,(III Year ECE),

Honorary Treasurer-Mr.M.Thanigaivel(III Year ECE),

SVCE-ISF Executive Members:

Mr.B.Akilesh Kumar (II Year ECE),

Mr.A.Kenwin Patrick (II Year ECE),

Mr.N.Siddique Afraaz (II Year ECE),

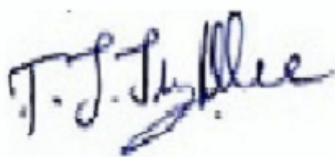
Ms.B.Amirta Josna (II Year ECE),

Ms.S.Krishnapriya (II Year ECE),

Ms.D.Saalini (II Year ECE)

synchronized well in communicating the significance of the webinar to the SVCE student fraternity and coordinated for the successful execution of the event.

The organizing team was also praised by the Chief Guest speaker for planning and executing the webinar.



Co-ordinator



Head of the Department
Electronics and Communication Engineering
Sri Venkateswara College of Engineering
Prossuravanki - 522 112, India

Sl. No.	University / College Roll No	First Name	
1	170701001	Aakash K.S.J.	ECE
2	170701004	Abirami Sivakumar	ECE
3	170701007	Afridha M	ECE
4	170701008	Agela M	ECE
5	170701010	Ajgith Krishnan	ECE
6	170701012	AKSHAYA C. R	ECE
7	170701016	Anirudh Balaji	ECE
8	170701017	Anusmrthi J	ECE
9	170701018	Anvita Ashokkumar	ECE
10	170701023	Balaji M	ECE
11	170701024	Baskar Ganesarajaram	ECE
12	170701026	Bhuvaneshwari Chandrasekaran	ECE
13	170701028	DEEPAN R	ECE
14	170701029	Dhanush kumar D	ECE
15	170701030	Dharmasurya A	ECE
16	170701031	Dhinesh Thyagarajan	ECE
17	170701032	DHYANESHWARAN N V	ECE
18	170701036	Gokulakrishnan K	ECE
19	170701038	S Gopalakrishnan Sundaramurthy	ECE
20	170701040	GUNDU PRAKASHAM Haranraj	ECE
21	170701042	Harini Sivakumar	ECE
22	170701043	Harish Damodharan	ECE
23	170701045	Hema Priya M	ECE
24	170701047	JAGADEESHWARI S	ECE
25	170701048	Jailesh Perumal S	ECE
26	170701049	Jayanth Subramanian Saravanan	ECE
27	170701050	Jayashree J N	ECE
28	170701055	KAMALI N	ECE
29	170701056	Kamesh V	ECE
30	170701058	Kavwin Kailash N	ECE
31	170701059	Kavya E	ECE
32	170701060	KEERTHANA LAKSHMI KESAVAN	ECE
33	170701061	Keerthana Ramesh sankar	ECE
34	170701062	Keerthi Raj Dillibabu	ECE
35	170701063	Keshav E	ECE
36	170701064	Keslin M	ECE
37	170701068	Kiruthiga B	ECE
38	170701069	Kishore Kumar	ECE
39	170701070	Krishkumar S	ECE
40	170701072	Lakshmi Narayanan.R	ECE
41	170701073	LOGESHWARAN M	ECE
42	170701074	Lokesh S	ECE
43	170701075	Madhumitha S	ECE
44	170701078	MARY SHARON	ECE
45	170701084	Narendiran Arumugam	ECE
46	170701086	NELAKANTI SAI MOUNIKA	ECE

47	170701089	Nimmagadda V S A Bhargava Abhiram	ECE
48	170701091	Nisha Sunny	ECE
49	170701093	Nitish K	ECE
50	170701096	Prakash Chellapandian	ECE
51	170701099	Preetha G	ECE
52	170701101	Prem Raj S	ECE
53	170701102	Pritam A	ECE
54	170701103	Ragavi Annamalai	ECE
55	170701104	Rahil H Sakariya	ECE
56	170701105	Rahil Jain	ECE
57	170701108	Raksha P.k.	ECE
58	170701111	RISHIKESH S	ECE
59	170701113	Saagar M	ECE
60	170701114	Saai Ghanesh P	ECE
61	170701117	Sai Harshith k	ECE
62	170701118	Sairam K	ECE
63	170701122	Santhosh S	ECE
64	170701125	Saranya Krishnamurthy	ECE
65	170701126	Shalini A J	ECE
66	170701129	Shivani R	ECE
67	170701131	Shruti Sharada S	ECE
68	170701133	SIVA AYTHIKA.A	ECE
69	170701135	subhashree p s	ECE
70	170701137	SUDHARSHAN HARIHARAN	ECE

Event Coordinator

Head of the Department
 Electronics and Communication Engineering
 Sai Venkateswara College of Engineering
 Sriperumbudur - 602 117, India