K S R COLLEGE OF ENGINEERING, TIRUCHENGODE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University

Chennai

ORGANIZED BY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

GUEST LECTURE

ACADEMIC YEAR: 2019-2020

TITLE

"RECENT TRENDS IN MOBLIE COMMUNICATION"

On

03.09.2019

Co-ordinator: Mrs.P. Thilagavathi, ASP/ECE



A.S.R. COLLEGE OF ENGINEERING K.S.R. KALVI NAGAR, TIRUCHENGODE-637, 245



K.S.R.COLLEGE OF ENGINEERING: TIRUCHENGODE – 637215 (Autonomous)

Event Schedule and Report

1	Name of the Event (Seminar/Workshop/Conference/FDP/Any other)	Guest Lecture on Recent Trends in Mobile Communication			
2	Name of the Department	Electronics and Communication Engineering			
3	Date of the Event	03.09.2019			
4	Venue	Seminar Hall			
5	Title of the Event	Guest Lecture on Recent Trends in Mobile Communication			
6	Name of the Co-ordinators	Mrs.P.Thilagavathi , Associate Professor/ECE			
7	Total Participants	163			
,		This Guest Lecture provides students a better			
8	Objectives of the Event	This Guest Lecture provides students a better opportunity to learn about the fundamentals of Mobile communication and Wireless Technologies. It also gives new prospects and ideas that can open student's eyes			
		to new possibilities which can help them to achieve more with less effort.			





K.S.R. COLLEGE OF ENGINEERING (Autonomous), Tiruchengode –637215 Department of Electronics and communication Engineering Organizes "Guest Lecture on Recent Trends in Mobile Communication"

On 03.09.2019

Report of the Program

Intent of Guest Lecture:

Skill development is mandatory among the students and gives students a better opportunity to learn about an explicit topic in a way that gets them involved in the class and actively join in a more convenient way of teaching. Keeping this in mind, "Guest Lecture on Recent Trends in Mobile Communication" is organized.

Theme of Guest Lecture:

We can say that wireless phone standards have a life of their own since they are spoken of reverently in terms of generations. The ancient stone-age sounding 1G, or analog cellular, then like 80"s rock came 2G, or digital cellular; 3G wireless, 4G, 5G and so on. The last decade stood witness to remarkable burgeoning in the wireless industry, both in terms of mobile technology and its subscribers. With all the technological advances, and the simultaneous existence of the 2G, 2.5G, 3G and 4G networks, the impact of services on network efficiency have become even more critical. And the latest addition to this group, is the 5G technology, which promises to revolutionaries Internet as we know it with lightning fast speeds.

So, the last decade stood witness an astounding growth in the network communication industry. The ever-increasing demands of users triggered research and led to development of various generations of technologies, which recently lead to a comprehensive manifestation of upcoming 5G system.

Thus, Keeping all these concepts into consideration, this guest lecture titled "Guest Lecture on Recent Trends in Mobile Communication" was organized on 3rdSeptember 2019.

Topics Covered:

The Programme is designed in such way that the participants start with learning about wireless standards and various generation of mobile technology from 1G to 5G. The following research topics were discussed in the Guest Lecture to enhance the knowledge on mobile technology.

- Introduction to wireless standards
- Evolution of Cellular Mobile communication
- GSM Basics
- CDMA principles
- Digital Modulation Techniques
- OFDMA & LTE(4G)
- Overview of 5G
- IP networking in Mobile communication
- IMS-Multimedia over IP
- BSNL WINGS—First commercial VoIP services in India
- IOT(Internet Of Things) networks & M2M
- MDO-Mobile Data Offloading

Overall, updated and useful research methodologies were discussed in connection with the development of various generation of mobile technology.

- Charland

Co-ordinator

HOD/ECE

Principal

K.S.R.College of Engineering, Tiruchengode - 637 215. (Autonomous)

Department of Electronics and Communication Engineering

Date: 27.08.2019

Submitted to the principal

Sub: Requisition to conduct Guest lecture - Reg.

We have planned to conduct IETE sponsored Guest lecture on "Recent trends in Mobile Communication" for ECE students on 03.09.2019 from 9.30a.m to 2.00p.m. So we request you to grant the permission to conduct the Guest lecture on above mentioned date with a financial assistance of Rs.4000/-

Resource person: Mr. Madhavan. T.R., Sub Divisional Engineer, 4G Mobile switching centre,

BSNL- Tamilnadu Circle.

P.Thilagavathi,ASP/ECE

AJayamathi, ASP/ECE

HOD/ECE

pm

Co-K-S-RCONFLANCION CO-K-S

K.S.R.COLLEGE OF ENGINEERING, TIRUCHENGODE-637215

(AN AUTONOMOUS INSTITUTION)

NBA Accredited and ISO Certified Institution

Approved by AICTE and Affiliated to Anna University

WE CORDIALLY INVITE YOU ALL FOR THE GUEST LECTURE On

"RECENT TRENDS IN MOBILE COMMUNICATION"

Lion Dr. K.S.RANGASAMY., MJF,

Founder and Chairman, K.S.R. Group of Institutions, Tiruchengode.

Will kindly consented to deliver the Presidential Address

Thiru. R.SRINIVASAN, B.B.M, MISTE.,

Vice Chairman, K.S.R. Educational Institutions, Tiruchengode.

Will kindly consented to deliver the Felicitation Address

Dr.P.SENTHILKUMAR,

Principal,

K.S.R.College of Engineering, Tiruchengode.

has kindly consented to preside over the function

Chief Quest

Mr.MADHAVAN.TR
SUB DIVISIONAL ENGINEER,4G MOBILE SWITCHING CENTRE,

BSNL-TAMILNADU CIRCLE

Coordinator :Mrs.P.Thilagavathi, Associate Professor/ECE

Date:03.09.2019

Venue :MCA Seminar Hall

ALL ARE WELCOME

Time:9.30 A.M



AGENDA

Invocation : ECE Students

Welcome Address : Dr.P.S.Periasamy,

Professor and Head,

Department of ECE,

K.S.R.College of Engineering,

Tiruchengode.

Presidential Address : Lion Dr. K.S.RANGASAMY., MJF,

Founder and Chairman.

K.S.R. Educational of Institutions,

Tiruchengode.

Felicitation Address ; Thiru. R.SRINIVASAN, B.B.M, MISTE.,

Vice Chairman,

K.S.R. Educational Institutions,

Tiruchengode.

Felicitation Address : Dr.P.SENTHILKUMAR,

Principal,

K.S.R.College of Engineering,

Tiruchengode.

Inaugural Address : Mr.MADHAVAN.TR

SUB DIVISIONAL ENGINEER.

4G MOBILE SWITCHING CENTRE.

BSNL-TAMILNADU CIRCLE

Vote of Thanks

TIRUCHENGODE CONTROL C



K.S.R. College of Engineering



(Autonomous)

K.S.R. Kalvi Nagar, Tiruchengode - 637 215, Namakkal Dt. TamilNadu

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ETE SPONSERED GUEST LECTURE ON

RECENT TRENDS IN MOBILE COMMUNICATION

DATE: 03.09.2019

VENUE: MCA Conference Hall

TIRUCHENGODE-637 2

Profile

MADHAVAN TR

SUB DIVISIONAL ENGINEER,4G MOBILE SWITCHING CENTRE,BSNL-TAMILNADU CIRCLE

DOB: 08-11-1971, Mobile: 9486100113

Email: madhutr1971@yahoo.com

------Education------

MSC (Electronics and communication)

1992

National college

Trichy.

MBA (Systems) 2005 Alagappa university Karaikudi.

-----Professional Summary------

Joined Department of Telecom as Junior Telecom Officer in May 1996. Focused and diligent Telecommunication Engineer with broad experience in Landline and mobile telecommunication system installation. Highly skilled at coordination and integration of telecommunication infrastructure with other facility engineering systems. Expertised in operation & maintenance of 2G,3G&4G mobile network systems.

------Career History-----

- From Jun 2018: Sub divisional Engineer,4G Mobile switching centre, BSNL-Tamilnadu circle
- From Nov 2009 to May 2018: Sub divisional Engineer,3G Mobile switching centre, BSNL-Tamilnadu circle
- From Jul 2006 to Oct 2009: Sub divisional Engineer, Gateway Mobile switching centre, BSNL-Tamilnadu circle
- From Jan 2002 to Jun 2006: Sub divisional Engineer, Newtech Installation, BSNL-Tamilnadu circle
- From Mar 1996 to Dec 2001: Junior Telecom Officer, Newtech Installation, BSNL-Tamilnadu circle

------Skills------

- Thorough knowledge on Mobile networking systems and their communication protocols
- Plan, design and maintenance of IP networking for telecom networks
- Handling Implant training sessions on mobile communication for Engineering college students
- Providing Guest Lectures/Speeches on Mobile communication in Seminars/workshops held in Engineering colleges.

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KSRCE/QM/8.2.4/5.3/ECE K.S.R. COLLEGE OF ENGINEERING (Autonomous), TIRUCHENGODE – 637 215. DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Guest lecture on "Recent trends in mobile communication" on 03.09.2019

LIST OF PARTICIPANTS

S.NO	REG. NO.	NAME OF THE STUDENT	Signature
1.	1815001	ARUNPRAKASH .D	Knythrian & . I
2.	1815004	GANGAA SRI .S	CIALA
3.	1815005	GOPIKA.V	1/0000
4.	1815006	JONISHA .M	M. Jonkal.
5.	1815008	KARTHIKEYAN .K	8/10
6.	1815009	KAVIYA .A	1
7.	1815010	KEERTHANA .S	QUI, et
8.	1815011	MONISHA .S	S. N.
9.	1815013	NIVETHA .P	D Name
10.	1815014	POOJA .P	P.Povia i
11.	1815015	POOJA PRIYADHARSHINI .R	D.P.J.
12.	1815016	SALAMUDEEN .K.S	K.S. S. S. S. Smudgen
13.	1815017	SARAN .M	M. 84
14.	1815018	SARAVANAN.V	V. Jant.
15.	1815019	SELVAKUMAR .S	al Solvalamor
16.	1815020	SENTHIL KAASI .R	2. Strip Lacord
17.	1815021	SIVA.U	
18.	1815023	SRIVANAN .K	12. Roger 7
19.	1815024	SUDHARSAN .V.T	VIS
20.	1815025	SURYAPRAKASH .R	Design
21.	1815026	SWETHA .G	C. (2)
22.	1815028	VIGNESHWARAN .M.S	Marin
23.	1815029	VIJAYALAKSHMI .G	Galala
24.	19LEC01	BALAMURALIDHARAN .K.R	K.D. Bolanisatotts
25.	19LEC03	DEEPAK .K	K. Nogall
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27.	19LEC05	HARIHARAN .R .	P. Sri
28.	19LEC06	HINDHUSHA .S	Coci
29.	19LEC08	PAVITHRAN .S	880-12W
30.	19LEC09	PRAVEENKUMAR .D	D. Brahout 7
31.	19LEC11	SARAN .S	3-14
32.	19LEC12	SIVA ABHISHEK .R	101
33.	19LEC13	SRIDHARAN .P	(877)
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128.	1615062	SALMANKHAN.S	Salnath
129.	1615063	SANJAY KUMAR, S.	Can
130.	1615065	SANTHOSH, M.	M. Farity
131.	1615074	SHANMUGAPRIYA, M.	M.SW.
132.	1615076	SHIGANDH.A.D	Shigan
133.	1615078	SRITHIRUMALAIVASAN, K.S.	K.S S.X
134.	1615081	SURESH KUMAR, M.	m. Sus
135.	1615084	THAMARAI KANNAN, N.	Thamaili
136.	(1615085	THAMARAIKANNAN VENKATACHALAM	Thang
137.	1615089	VIJAYGANESH, K.	(Rout Colds
138.	1615501	KATHIRVEL.T	rate
139.	1615502	LOGESH.K	LOGALI
140.	1615504	MANIKANDAN.S	mano
141.	161,5505	MANIVANNAN, V.	marison
142.	1615506	POOVARASAN, P	Dooratha
143.	1615507	PRASANNA VENKATESH, S.	Dh.
. 144.	1615508	PREETHI, S.	Smith
145.	1615509	SABARISH, R.	The state of the s
146.	1615510	VARSA, V.	V. Varson
147.	1615002	ALEX KUMAR.J	000
148.	1615010	BHARANI.S	R
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150.	1615028	HARIPRABHA.K	Cul
151.	1615031	KAVIN.M.S	Ath
152.	1615048	PAVITHRAA.B.S	DIST
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158.	1615073	SHANMUGAM.T,P	Sather 1
159.	1615005	ARUN KUMAR.B	Shamahi
160.	1615008	ASHWIN.B	B.Ai
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163.	1615086	VENKATESH.D	D. Suly

COORDINATOR CP-THULAGAVATHI)

K.S.R. COLLEGE OF ENGINEERING K.S.R. KALVI NAGAR, TIRUCHENGODE-637 215.

HOD-ECE

KSRCE/QM/5.5.3/01/ECE

K.S.R. COLLEGE OF ENGINEERING (Autonomous), Tiruchengode - 637215

Department of Electronics and Communication Engineering

FEEDBACK FORM FOR GUEST LECTURE

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2.	How relevant was the content discussed by the speaker?				
3.	Are you satisfied with the time and venue?				
4.	How much interesting this session was for you?				
5.	Did the lecture cover what you were expecting?			<u>.</u>	
6.	What is your opinion about the				

Additional comments and suggestions for future

How much this session was

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Thank You

KSRCE/QM/5.5.3/01/ECE

K.S.R. COLLEGE OF ENGINEERING (Autonomous), Tiruchengode - 637215

Department of Electronics and Communication Engineering

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Additional comments and suggestions for future

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Date: 03.09 2019

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Thank You

KSRCE/QM/5.5.3/01/ECE

K.S.R. COLLEGE OF ENGINEERING (Autonomous), Tiruchengode - 637215

Department of Electronics and Communication Engineering

	FEEDBACK FORM FOR				۸ ۸
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2.	How relevant was the content discussed by the speaker?				
3.	Are you satisfied with the time and venue?		1		
4.	How much interesting this session was for you?	1			
5.	Did the lecture cover what you were expecting?		1		
6.	What is your opinion about the speaker?	<u>.</u>	1		
7.	How much this session was useful from the knowledge and information point of view?				
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K.S.R.COLLEGE OF ENGINEERING(AUTONOMOUS), TIRUCHENGODE -637215 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Impact Analysis on Guest Lecture

Department of Electronics and Communication Engineering had organized an IETE sponsored Guest Lecture on "Recent Trends in Mobile Communication" on 3 rd September 2019 from 9:30 AM to 1:30 PM in MCA Seminar Hall.

The guest lecture began with welcome address by Dr. P.S.Periasamy, Head of the Department, ECE. He introduced and welcomed **Mr.Madhavan,TR, Sub Divisional Engineer,4G Mobile Switching Centre, BSNL-Tamilnadu Circle,** resource person to deliver the lecture. The lecture was attended by 140 students and 5 Faculty members of Electronics and Communication Engineering Department.

The lecture started with "Introduction to Wireless Standards". He stated that different standards of wireless communication have developed across the world, based on various commercially driven requirements. These technologies can roughly be classified into four individual categories, based on their specific application and transmission range as WAN, MAN, LAN and PAN.

In Evolution of Cellular Mobile communication he told that in few past decades , the mobile wireless evolution progressed from Zero Generation (0G) to First Generation (1G), Second Generation (2G), Third Generation (3G), and now Fourth Generation (4G) systems are being deployed with the aim Quality of Service (QoS), efficiency and performance. Mobile wireless technology has reached to 4G or 5G of Technology. 1G technology made large scale mobile wireless communication possible. Digital communication has replaced analog technology in 2G which significantly improved wireless communication. Voice communication was main focus in 3G technology, and converged networks for both voice and data communication was main focus in 3G technology, and converged networks for both voice and data communication is emerging. Currently 5G term is not officially used.

.He stated that Global System for Mobile Communication (GSM) is a second Generation cellular mobile communication standard developed to cater voice and data services using digital communication techniques.He discussed elaborately on GPRS and WCDMA.Various Digital Modulation Techniques were discussed.

Mobile communications are clearly going to show major enhancements in terms of capabilities of mobile networks. The next generation of wireless services, besides improving the overall capacity, will create its own unique demands in terms of localization, personalization, etc., which will in turn, drive the development and continuous evolution of services and infrastructure.

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K.S.R.COLLEGE OF ENGINEERING (AUTONOMOUS), TIRUCHENGODE -637215 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Impact Analysis on Guest Lecture

From Participant's Feedback

S.No	Parameter to be Analyzed	Number of Students				
3.NO		Extremely Good	Good	Quite Good	Poor	
1.	Overall Organization of the Lecture	98	60	5		
2.	Relevant Information	69	85	9	-	
3.	Time and Venue	68	83	9	3	
4.	Kindling about the Subject Knowledge	62	88	10	3	
5.	Anticipation of Speech	69	80	10	4	
6.	Opinion about Speaker	79	74	10	-	
7.	Usefulness of the session from the Knowledge and information point of view	78	78	7		
8.	Overall effectiveness of the Lecture	72	76	13	2	

 The Guest Lecture was very informative that the students learnt about fundamentals of Mobile communication and Wireless Technologies. The lecture was even more interesting with the examples he gave relating to each topic. It was wonderful Knowledge sharing and gaining lecture regarding Mobile Communication.

Impacts:

- This Guest lecture helped the students to improve their knowledge on the field of Wireless
 Communication and the students may have the opportunity to participate in more workshops
 that have taken place under various topics on Wireless Communication, held at various other
 colleges.
- The Students may also be insisted to publish many articles on Wireless Communication.
- The Guest Lecture has also motivated the students to do more projects on Wireless Communication.

Impacts on Programme Outcomes:

PO1-Engineering Knowledge:

This Guest Lecture provides basic engineering knowledge on wireless communication.

PO11-Project Management and finance:

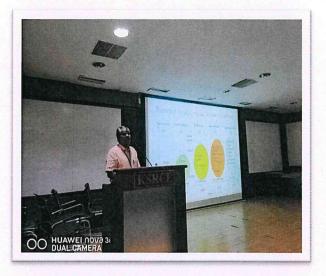
This lecture motivated many of the students to do project on Wireless Communication.

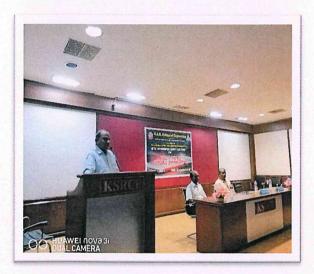
PO12-Life-long Learning:

This lecture provides information on mobile communication and hence helps life-long learning.

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Namakkal, Tamil Nadu, India MBA Block, Tamil Nadu 637215, India Lat 11.356976 Long 77.827178