

Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ❖ Approved by AICTE ❖ ISO 21001:2018 Certified Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA. Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

31-05-2021

Webinar

on

RADAR, SAR & Its Applications

Circular:

Ref: KLEF/RO/HOD-ECE/2020-21

Date: 01-06-2021

Orders of the Pro Vice Chancellor dt.01.06.2021

CIRCULAR

Sub: Webinar on "RADAR, SAR & Its Applications" by CSRG Research Group, Department of ECE, KLEF -

Reg

Ref: E-mail dated 31.05.2021 from Dr.M. Suman, HoD-ECE.

This is to inform that Communication Systems Research Group (CSRG), Department of ECE, is conducting a webinar entitled "RADAR, SAR & Its Applications" for all the faculty members of both KLEF Vaddeswaram and Hyderabad campuses as per the details given below.

: Dr. Sudhir Kumar Chaturvedi, Associate Professor, Department of

Aerospace Engineering, UPES Dehradun, India

Organizer : Communication Systems Research Group (CSRG), Department of ECE, KLEF

Date & Time: 01 June 2021, 4PM - 5 PM

Registration link: https://forms.gle/clxQzeFVWfuVpNNr8

: Dr. D. Venkata Ratnam, Professor & Research Head, ECE, KLEF

Co-Conveners: Dr. Lakshman Pappula, Associate Professor and Deputy HOD, ECE, KLEF

Dr. Sampad Kumar Panda, Associate Professor, ECE, KLEF Webinar Link: https://kluniversity.webex.com/kluniversity/j.php?

MTID=m10306a897034c2106578ace322e55e0a

Poster of the webinar is attached herewith. E-certificate will be provided to the attendees.

For further details Dr. Sampad Kumar Panda, Co-Convener, Mobile No.+91 9392665582 can be contacted.

REGISTRAR

Encl: Webinar Poster & Details

Mail & Hard copy to: Hon'ble President, KLEF

Mail to: Hon'ble Vice-Presidents, KLEE

Mail & Hard copy to: Hon'ble Chancellor / Hon'ble Pro Chancellor

Mail & Hard copy to: Hon'ble Pro Vice Chancellor (Administration)-Dr.N. Venkatram

Mail & Hard copy to: OSD to Hon'ble Chancellor-Dr.K. Subrahmanyam

Mail to:Chief Coordinating Officer-Dr.A. Jagadeesh / Chief Coordinating Officer of Examinations-Dr.K.J.Babu Mail to: Controller of Examinations-Dr.A.S.C.S.Sastry

Mail to: KL H - Dean / / Principal-Engg. College / Principal-Business School / Vice-Principal

Mail to: Vice-Principal-Coll. of Science & Humanities & Coordinator-FED..Dr.VKR

Mail & Hard copy to: HoDs.. AI&DS / BT / CE / CSE / Comp.Engg. / CS&IT / ECE / EEE / ECM / ME

HoDs., Maths / PHY / CHEM / ENG / BES-I / BES-II

HoDs..MBA / BBA / COM / HM / CSS / CA&MS / Law / Architecture / Pharmacy / BCA /

Mail to: All Dv. HoDs / All Alt. HODs

Mail to:KL H HoDs..CSE / AI&DS / ECE / BS / H&S / ME

Mail to: All faculty

Thanks & Regards





Poster:



Fig. Poster of webinar

1. Objective and discussions:

RADAR stands for Radio Detection and Ranging, and SAR stands for Synthetic Aperture Radar. Both are remote sensing technologies used for various applications,

Koneru Lakshmaiah Education Foundation



(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' & Approved by AICTE & ISO 21001:2018 Certified Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA. Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

particularly in the fields of military, aviation, meteorology, geology, and environmental monitoring.

1. RADAR (Radio Detection and Ranging):

 Principle: RADAR uses radio waves to detect the presence, direction, distance, and speed of objects.

Applications:

- Military: RADAR is extensively used for surveillance, target tracking, and missile guidance.
- Aviation: RADAR is crucial for air traffic control, providing information about the position and movement of aircraft to ensure safe navigation.
- Weather forecasting: Weather RADAR helps meteorologists track precipitation, storms, and other atmospheric phenomena.
- Navigation: RADAR is used in marine and land navigation to detect nearby obstacles, landmasses, and other vessels or vehicles.

2. SAR (Synthetic Aperture Radar):

 Principle: SAR is an advanced form of RADAR that uses the motion of the radar antenna to simulate a large antenna aperture, resulting in high-resolution images.

Applications:

- Earth observation: SAR satellites provide high-resolution images of the Earth's surface, which are used for monitoring environmental changes, urban planning, and agriculture.
- Disaster management: SAR is instrumental in assessing damage and facilitating rescue operations during natural disasters such as earthquakes, floods, and landslides.
- Military reconnaissance: SAR imagery is used for reconnaissance, mapping terrain, and identifying targets.
- Geology: SAR can penetrate through clouds and vegetation, making it useful for geological studies, such as mapping terrain

Koneru Lakshmaiah Education Foundation



(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' & Approved by AICTE & ISO 21001:2018 Certified Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA. Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

features and monitoring geological hazards like volcanoes and landslides.

In summary, RADAR and SAR technologies play vital roles in various fields, from military and aviation to environmental monitoring and disaster management, providing valuable data for decision-making and analysis.

Online Link:

https://kluniversity.webex.com/kluniversity/ldr.php?RCID=5595af6d9acfea0ffbe75c8d1a8f6495

Number of participants: 89



RADAR, SAR and It's Application by

Sudhir Kumar Chaturvedi UPES Dehradun, India M: +91-8755805216

ENGINEERING | COMPUTER SCIENCE | DESIGN | BUSINESS | LAW | HEALTH SCIENCES | MODERN MEDIA

Fig. Snapshot of webinar presentation

Koneru Lakshmaiah Education Foundation (Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)



Accredited by NAAC as 'A++' ❖Approved by AICTE ❖ ISO 21001:2018 Certified Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA. Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

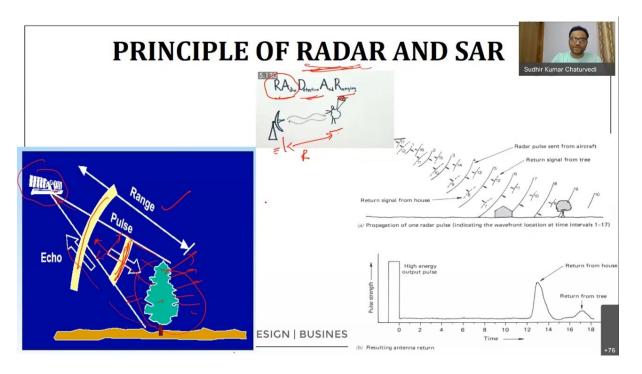


Fig. Snapshot of webinar presentation

List of the Participated Students:

S. No.	Roll No	Name
1.	190040352	MUTHULURU MANJUSHA
2.	190040315	MARAMREDDY VENKATA RAGHUNADH REDDY
3.	190040015	ALLAM VENKATA BINDU BHARGAV
4.	190049024	GANAPAVARAPU VEDAVYAS
5.	190040508	SYED MOHAMMAD ASHRAF
6.	190040510	SYKAM NIKHITHA
7.	190040456	SASUBILLI DURGA PRASANTH
8.	190040326	MEDASANI SAHITHA
9.	190040148	GOLLU SAI VENKATA NARENDRA
10.	190040077	CHANDAKA MANOJ KUMAR
11.	190040349	MUSINI HARISH
12.	190040530	UMA VENKAT MADEPALLI
13.	190040473	SHAIK MOHAMMED JAFAR HUSSAIN
14.	190040242	KOMMANA HARSHA VARDHINI
15.	190040101	CHUNDURU VARUN SAI
16.	190040466	SHAIK FAIZALRAHAMATH
17.	190040216	KARUMURI DHANESH
18.	190040411	POTHANI PRABHUKIRAN
19.	190040006	ADUSUMALLI SAI PAVAN
20.	190040372	NUKALA AKSHAY KUMAR

Koneru Lakshmaiah Education Foundation (Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)



Accredited by NAAC as 'A++' ❖Approved by AICTE ❖ ISO 21001:2018 Certified Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA. Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

21.	190040060	BOINA MONISHA SAI
22.	190040056	BHAGAVATHULA SATHWIK
23.	190040149	GUNA KOUSHIK REDDY GOLUGURI
24.	190040172	GURRALA JAHNAVI
25.	190040577	SAIKEERTHI YADLA
26.	190040509	SOHAIL AHMMED SYED
27.	190040324	MAVURU SAMPATH REDDY
28.	190040392	PALREDDY NANDHINI
29.	190040666	KOTIPALLI JAHNA PRAVALLIKA
30.	190040186	JANGA VINAY KUMAR REDDY
31.	190040111	SAI SATYA SIVA VAMSI KRISHNA DASARI
32.	190040394	PAMURU VISHAL REDDY
33.	190040268	KUCHIMANCHI SATYA NAGARAJ GANESH
34.	190040241	KOMMA JASMITHA
35.	190040287	MADALA NIHARIKA
36.	190040674	KOTTAKOTA CHAITANYA
37.	190040424	PUPPALA MOHAN KRISHNA
38.	190040152	GORRE SAHITHI
39.	190040173	GURRAM RISHITHA
40.	190040041	BANDI NAGA DIVYA SREE
41.	190040276	LAKSHMI DURGA ANUHYA SREERAM
42.	190040501	SURAGAM GNANENDRA

Professor & Head
Department of ECE
K L E F
Green Fields, Vaddeswaram
Inntur Dist., A.P. PIN: 522 502