"RESEARCH PRESPECTIVES OF AI,ML,DATA SCIENCE AND IOT"

heldfrom17thMay to05thJune2021.

About K L University: the Koneru Lakshmaiah Education Foundation was established in 1980-81, as K L College ofEngineering, which was upgraded to K L College of Engineering Autonomous in 2006 by UGC and was declared as aDeemed to be University in 2009 by UGC, MHRD Govt. of India. In 2012 as a Deemed to be University, the institutionwas accredited by NAAC with an A Grade and later in 2018, was re-accredited by NAAC with an A++ grade. In 2019UGC, MHRD declared this intuition as a Category I Institution. The institutes remain indebted to the leadership of ourlate co-founder Er. Koneru Lakshmaiah and our Founder Er. Koneru Satyannarayana, both of whose vision has helpedincreatingthisabodeoflearning,hasemerged asoneoftheelite institutes ofthenation.

The Department of Electronics and Computer Science, KLEF organized a two week National level Short Term Training Program on"**RESEARCH PRESPECTIVES OF AI,ML,DATA SCIENCE AND IOT**" held from 17th May to 05thJune2021in association with Academic Staff College, KLEF.

About the STTP: This STTP is aimed at giving hands-on training to the faculty members, PG Students, andqresearch scholars on various aspects of IoT, AI, ML, Data Science.The STTP comprised aseries of technical presentations and a video demonstration of laboratory-based IoT, AI, ML, Data Scienceexperiments. The experiments will use the Arduino and other relevant IoT support technologies andA.I.,ML, Data Science simulation software's using python and AWS cloud and think to speak cloud fordeploying IoT applications. The STTP is being conducted online mode using facilities MS-Teams/CISCO WebEx/Zoom Application through which resource persons from their respective residence attended all sessions and theregistered participants were able to interact with them onlineusing their Desktop / Laptop /Tablet/ Smart Phonewithinternet connectivity.

Thecoursecontentisdeliveredfromapoolofresourcepersonsonthesubjectfromleadingindustriesandprestigious academic institutions. Massive Participation by the faculty members of the Engineering and Technicalinstitutions,Researchscholars,P.G.Students,Industry,andResearchScientistsfromprivate/Government(Bureaucrats/Technicians/ParticipantsfromIndustry, etc.)

Resource Persons:
- Dr. Lalit Singh,
- Dr. Midhun Chakkaravarthy,
- L Venkata Rama Raju,
- Mr. T S V Rajeev,
- Mr.Pattabhi Raman Bobba,
- Dr.Lalitha Bhaskari,
- Dr. E.Suresh Babu,
- Mr. Vamsi Krishna,
- Dr. E.Suresh Babu,
- Dr.NagarajuBaydeti,
- Mr.Rockey Jagtiani,
- Dr. J. Arul Valan,
- Dr. Ramesh Kumar Mojjada,
- Mrs. K. Krishnaveni,
- Mr. Ch Bhupati.

Aimand ScopeoftheSTTP:

This STTP aims to provide a premier interdisciplinary platform for researchers, practitioners, and educators to learnand discuss the most recent innovations, trends, and concerns, as well as practical challenges, encountered andResearchPerspectives onAI, ML, DataScience.

TheSTTP comprises a series of technical presentations and a video demonstration of laboratory-based IoT, AI, ML,Data Scienceexperiments.The experiments will usethe advanced embedded platformsandother relevant IoT support technologies and A.I., ML, Data Sciencesimulation software are usingpython and AWS cloudOver 40 objectives were meant and but are not limited to: Predictive Analytics, ConvolutionNeuralNetworksforComputerVision,RecurrentNeuralNetworks,Generativeadversarialnetworks (GAN), Natural Language Processing, transforming healthcare using Artificial Intelligence, Data in ArtificialIntelligenceandmany more.

Topics included:

- ✓ MLandseismicsignalprocessingapplications
- ✓ Pythonhandsonprogrammingsessions
- ✓ NatureInspiredOptimizationAlgorithmsandItsApplications
- ✓ AIinHealthcare:EmergingTrends,UseCasesandFutureDirections"
- ✓ IntroductiontoRecommendationSystem

- ✓ Microservicesdeploymentoncloud
- ✓ Deepthinkingforsafetyanalysisof safety-criticalsystems

Figure 1:GuestsandResourcepersons

- ✓ GradientDescentSolver,DNN,Briefintroductiontosemanticsimilarity,Word2VecWordEmbeddings
- ✓ BasicsofDockerandKubernetes

The Speakers highlighted the current IoT challenges including security, privacy, and scalability, etc along with other challenges of IoT which include processing, storing, and analyzing a large amount of data that comes from so many different resources. An overview on Research Perspectives on AI, ML, Data Science & IoT that are extremely useful in our daily life, such as smart cars, home appliances, and security, health- tracking wearable devices, weather monitors, etc. along with challenges and possible solutions are discussed. The Speakers also stressed Cyber Security technologies that processes and

practices aimed to protect networks, computers, programs, and data from attack, damage, or unauthorized access.
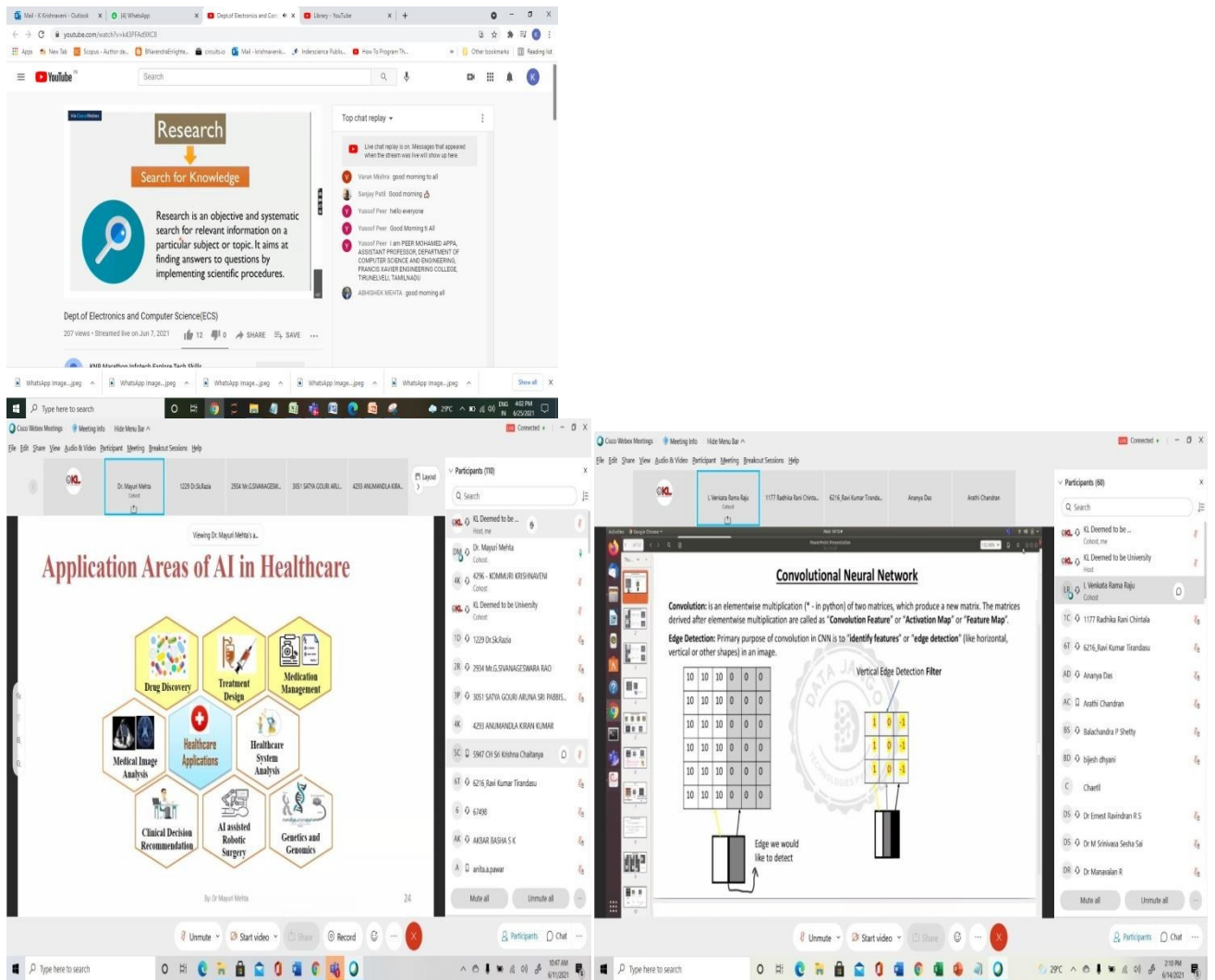

Figure2:WebEx&YouTubeParticipation

A total of 14-Days- STTP brought a lot of experience with over 250 + massive participants all the days inWebEx meetings and on YouTube Live streaming. It has been achieved 862 subscribers 5784 views onYouTube social media whichuplifts the Internet Traffic.

Academic Staff College

Certificate of Participation

This is to certify that
DR. KALLA V BANGARU GANESH

Has participated in the

Three-weeks Faculty Development Program on

RESEARCH PRESPECTIVES OF AI,ML,DATA SCIENCE AND IOT

During **17.05.2021 to 05.06.2021**

Principal
ASC

Academic Staff College

Certificate of Participation

This is to certify that
DR. KAMBALAPALLY VINUTHNA

Has participated in the

Three-weeks Faculty Development Program on

RESEARCH PRESPECTIVES OF AI,ML,DATA SCIENCE AND IOT

During **17.05.2021 to 05.06.2021**

Principal
ASC