



# KONGU ENGINEERING COLLEGE

(Autonomous)

PERUNDURAI, ERODE – 638 060 TAMILNADU INDIA

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)



Transform Yourself

DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

Ph: 04294-220562, 220583 EXT:550 (EIE) Fax : 04294 – 220087

Website: www.kongu.ac.in

Dr. S.VIJAYACHITRA  
Professor and Head

05.10.2020

Ref: TNSCST/PFA/SSW/VR/Batch-2/73/2019-20/12415, Dated: 28.09.2020

To

Dr. R.Srinivasan,  
Member Secretary  
Tamilnadu State Council for Science and Technology (TNSCST)  
Sardar Patel Road  
DOTE Campus  
Chennai-600 025

Respected Sir,

Subject: TNSCST Sponsored seminar- ONLINE mode - change in schedule-regarding

First of All, we thank TNSCST for approving partial financial support for conducting National level seminar on "Deep Learning Techniques for Military Surveillance Applications" scheduled during 06.02.2020 & 07.02.2020.

As the seminar was not conducted as per the proposed schedule, we would like to conduct the seminar during **02.11.2020 & 03.11.2020** by **ONLINE** mode. We request you to kindly grant permission to conduct the seminar by online mode during newly proposed dates.

Thanking you

Yours Sincerely,

(S.VIJAYACHITRA)

Convener

**Programme Report for the Sponsored Seminar**

TNSCST Ref No. & Date	TNSCST/PFA/SSW/VR/Batch-2/ 73 /2019-20/12415, Dated: 28.09.2020
Nature of the activity	: <b>Seminar</b>
Duration with dates:	: Two days – <b>02.11.2020 and 03.11.2020</b>
Topic	: National Seminar On “ <b>Deep Learning Techniques for Military Surveillance Applications</b> ”
Grant Sanctioned	Rs.20,000/-

**Organizing Team**

Organizing Secretary & Convener: Dr.S.Vijayachitra  
Professor and Head  
Department of Electronics and Instrumentation Engineering,  
Kongu Engineering College,  
Perundurai, Erode - 638 060, TN.  
Tel.: +91 - 4294 226550,  
Mobile No.: +91 – 98657 80707  
E-mail: [svijayachitra@kongu.ac.in](mailto:svijayachitra@kongu.ac.in)

Co-ordinators:

- |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Dr. N. Mahesh,<br>Associate Professor,<br>Department of Electronics and Instrumentation Engineering,<br>Kongu Engineering College,<br>Perundurai, Erode - 638 060, TN.<br>Mobile No.: +91 – 999441 97349<br>E-mail: <a href="mailto:mahesh@kongu.ac.in">mahesh@kongu.ac.in</a> | 2. Ms. M. Lizzy Nesa Bagyam,<br>Assistant Professor (Senior Grade),<br>Department of Electronics and Instrumentation Engineering,<br>Kongu Engineering College,<br>Perundurai, Erode - 638 060, TN.<br>Mobile No.: +91 – 99439 60655<br>E-mail: <a href="mailto:lizzy@kongu.ac.in">lizzy@kongu.ac.in</a> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- |                                                    |                                                        |
|----------------------------------------------------|--------------------------------------------------------|
| 2. Duration / Period of the organized event        | : (02.11.2020 and 03.11.2020)                          |
| 3. Grant Sanctioned                                | : <b>Rs.20, 000/-</b><br>(Rupees Twenty Thousand Only) |
| 4. Have you submitted the Utilization Certificate? | : <b>Yes</b>                                           |

*Mahesh*  
*23/11/2020*

*Lizzy*  
*23/11/2020*

### 5. Brief Summary of the event

A two day national seminar on "DEEP LEARNING TECHNIQUES FOR MILITARY SURVEILLANCE APPLICATIONS" has been successfully conducted on 02 and 03 November 2020 with the financial support from TNSCST.

This national seminar deliberated the theory and implementation of machine learning techniques in the focused area of surveillance. Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it learn for themselves.

This seminar focused on the Drones which is used as autonomous flights with the help of dynamic automation systems and based on pre-programmed flight plans. It finds increased role in high-profile attacks execution and in avoiding conflicts. Some military versions drones can stay in air for hours or days at a time, and their high-tech cameras can scan entire cities, or alternatively.

Also, seminar throws a light on the area for further improvising research and provide the state-of-art knowledge on various aspects of machine learning techniques and Deep learning in military areas.

### List of Experts

1.	<b>Mr.G.Laxminarayanan,</b> Founder – Myshiksha, Bengaluru
2.	<b>Dr.S.Lovelyn Rose,</b> Associate Professor, Department of CSE, PSG College of Technology, Coimbatore
3.	<b>Dr.A.Athif Shah,</b> ABE Semiconductor Designs, Chennai
4.	<b>Dr.S.Vijayachitra</b> Professor and Head, Department of EIE, Kongu Engineering College
5.	<b>Mr.T. Vignesh Prabhu,</b> System and Solution Architect, ABE Semiconductor Designs, Chennai

41 participants from various institutions are benefited through this seminar. We sincerely thank TNSCST for financially supporting to organize the seminar on this important and fast growing field in Deep Learning.

*Nillesh*  
22/11/2020

*Sub*  
22/11/2020





# KONGU ENGINEERING COLLEGE

[AUTONOMOUS]

PERUNDURAI, ERODE - 638 060



TRANSFORM YOURSELF

DEPARTMENT OF

**ELECTRONICS AND INSTRUMENTATION ENGINEERING**



**TNSCST SPONSORED**

A TWO-DAY SEMINAR ON



**DEEP LEARNING TECHNIQUES FOR  
MILITARY SURVEILLANCE APPLICATIONS**

## TOPICS TO BE COVERED

- >> Introduction to Artificial Intelligence
- >> Overview of Machine Learning and Deep Learning
- >> Fine tuning for deep learning
- >> Military Applications of UAVs and Drones
- >> Deep Learning for Computer Vision Systems
- >> Practical Approaches for implementing Deep learning in Computer Vision Systems
- >> Deep learning in Action

**CONVENER**

**Dr. S. VIJAYACHITRA**

**CO-ORDINATORS**

**Dr. N. MAHESH**

**Ms. M. LIZZY NESA BAGYAM**

**FREE REGISTRATION**

**E-CERTIFICATES WILL BE PROVIDED**

**(02) - - NOVEMBER - - (03)**



9944197349, 9943960655 | eierpd2020@gmail.com

CLICK, TO REGISTER - <https://forms.gle/rs6c3Lb1jSRmC4oA9>

**SCAN ME**



## Photographs (Screenshots of sessions)

meet.google.com/hhy-znsq-fhn

REC ABE SEMICONDUCTOR DESIGNS is presenting

Real Scenario – Try to find Maths behind the Learning algorithms

What happened to him?

He tried to study the math behind deep learning.

Meeting details

Mr.SHANKAR ARUMUGAM

sunita panda

M LIZZY NESA BAGYAM Iliz...

ABE SEMICONDUCTOR DESI... is presenting

Meeting details

Turn on captions

ABE SEMICONDUCTOR DESI... is presenting

hhy-znsq-fhn (2020-11-03 at 00:43 GMT-8)

Components of Time series Forecasting

Time Series Data

Seasonal

Trend

Cyclical

Irregular

ABE INTELLIGENCE GROUP

17:42 / 1:05:32

## Unstructured DataSet : Text

### REVIEW

The rooms were good and I liked the location since it was good

The hotel was very bad and the stay was unpleasant

Liked the huge play area and the food was nice

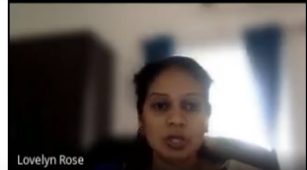
The stay was good and pleasant

The location was good but was bad overall because The staff were rude

### SENTIMENT

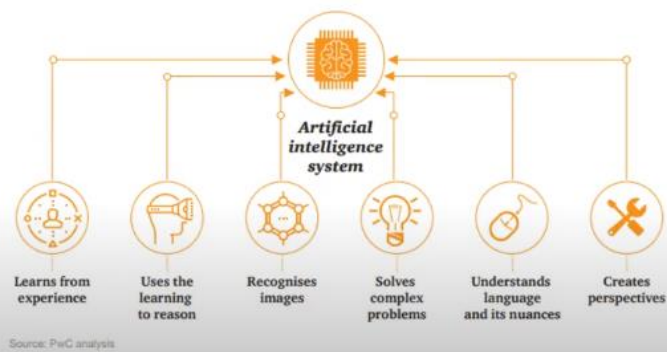


Python Toolkit : nltk  
Python Packages : string, re



Lovelyn Rose

## Artificial Intelligence System



Laxminarayanan G



**KONGU ENGINEERING COLLEGE, PERUNDURAI – 638 060**  
**DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING**

**TNSCST Sponsored Two Day National Seminar on**  
**“DEEP LEARNING TECHNIQUES FOR MILITARY SURVEILLANCE APPLICATIONS”**  
**(02.11.2020 & 03.11.2020)**

**PARTICIPANTS LIST**

S.NO	NAME OF THE PARTICIPANT	DEPARTMENT	INSTITUTION
1.	A. V. Lakshmi Prasuna	IT	Mahatma Gandhi Institute Of Technology
2.	Andrew Jebraj Godson A	EEE	Kumaraguru College of Technology
3.	Antony Vijay J	IT	Hindusthan College of Engineering and Technology
4.	Aswini Janet J. A	EIE	Bharathiar university
5.	Benson Mansingh P M	ECE	Sri Ramakrishna Institute Of Technology
6.	D.Menaga	CSE	B.S.Abdur Rahman Crescent Institute of Science and Technology
7.	Darshan Km	BME	Srm Institute Of Science And Technology
8.	Dr .S Sridevi	IT	Thiagarajar College of Engineering
9.	Dr. Minaxi Shivdas Bhagwat	EDUCATION	The Maharaja Sayajirao University Of Baroda
10.	Dr. S. Selvakanmani	CSE	Velammal Institute of Technology
11.	Dr. SHANTHI S	CSE	Kongu Engineering College
12.	Dr. Sunita Panda	ECE	GITAM Deemed to be University
13.	Dr.Kamalanathan Chandran	EECE	GITAM University, Bengaluru Campus
14.	Dr.P.Keerthika	CSE	Kongu Engineering College
15.	Dr.Sharmilee	ECE	Nandha Engineering College
16.	Dr.T.Jobby Titus	ECE	Sri Ramakrishna Institute of Technology
17.	G Merlin Linda	CSE	SRM Institute of Science and Technology
18.	Gokulnath.S	ECE	Jai shriram Engineering college, Tirupur
19.	Hariprasad E	EEE	Kumaraguru college of technology
20.	Indhu N	CIE	Kongu Engineering College

*11/11/2020*  
*23/11/2020*

*23/11/2020*

**KONGU ENGINEERING COLLEGE, PERUNDURAI – 638 060**  
**DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING**

**TNSCST Sponsored Two Day National Seminar on**  
**“DEEP LEARNING TECHNIQUES FOR MILITARY SURVEILLANCE APPLICATIONS”**  
**(02.11.2020 & 03.11.2020)**

**PARTICIPANTS LIST**

21.	Jayaprakash D	CSE	Kongu Engineering College
22.	M.Sangeetha	CSE	Kongu engineering college
23.	Manjula Devi R	CSE	Kongu engineering college
24.	Aftab Ahmad Mir	IT	Shri Venkateshwara University
25.	Munaf S	ECE	Sri Ramakrishna institute of technology
26.	Nandhagopal S	EIE	bharathiar university
27.	Padma Priya J	EECE	GITAM School of Technology, Bengaluru
28.	Ragini K	ECE	CEG Campus Anna University
29.	Rajalakshmi. P	E & I	Kongu Engineering College
30.	Reshnuvi R V	EIE	Kongu engineering college
31.	Revathi P	EIE	Kongu Engineeeing college
32.	S.G.Rahul	EIE	Madras Institute Of Technology,Chrompet
33.	S.Maheswari	EEE	Kongu Engineering College
34.	Sekar G	ECE	Sri Ramakrishna Institute of technology
35.	Shankar A	ECE	Sri Ramakrishna Institute of Technology
36.	Soubraylu Sivakumar	CSE	K L University
37.	Sowmya.R	ECE	College of Engineering
38.	Sudheer Reddy Bandi	CSE	Tagore Engineering College
39.	Swathi. D	EIE	Kongu Engineering College
40.	T. Vinitha	EIE	Kongu Engineering college
41.	Yuvaraj. K	EIE	Kongu Engineering College

*N. Mahesh*  
23/11/2020  
Co-ordinators  
(N. Mahesh)

*S. H. Sathish*  
23/11/2020  
HOD (EIE)





# KONGU ENGINEERING COLLEGE

(AUTONOMOUS)

Perundurai, Erode – 6380 60



DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING

## CERTIFICATE OF PARTICIPATION

This is to certify that

**S.G.RAHUL**

has participated in the TNSCST Sponsored Two Day National Seminar on “**DEEP LEARNING TECHNIQUES FOR MILITARY SURVEILLANCE APPLICATIONS**”, organized by the Department of Electronics and Instrumentation Engineering, Kongu Engineering College on **02.11.2020 and 03.11.2020**

Dr. N.MAHESH  
M.LIZZY NESA BAGYAM  
Co-ordinators



Dr. S.VIJAYACHITRA

HoD / EIE

Made for free with Certify'em

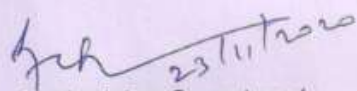
### UTILISATION CERTIFICATE

1. Scheme : Partial Financial Assistance for Seminar /  
Symposia / Workshop
2. Organiser / Co-ordinator,  
Institutional Address : Dr. S. Vijayachitra,  
Professor and Head,  
Department of EIE,  
Kongu Engineering College, Erode - 638 060
3. Council Sanction Letter details : Ref No. TNSCST/PFA/SSW/VR/Batch-2/73/2019-20/  
Dated: 28.09.2020 12415
4. Name, Venue and Date  
etc of the event details : Deep Learning Techniques for Military  
Surveillance Applications- 02.11.2020 & 03.11.2020  
Department of EIE, Kongu Engineering College.
5. Amount Sanctioned : Rs. 20,000/-

### CERTIFICATE


It is certified that a sum of Rs. 20,000 /- (Rupees  
TWENTY THOUSAND) only) sanctioned through Council's Sanction letter

No. 12415, dt. 28.09.2020 has been utilised for the purpose for which it  
(TNSCST/PFA/SSW/VR/BATCH-2/73/2019-20/12415)  
was sanctioned and the conditions of the sanction / approval has been fulfilled

  
Organising Secretary /  
Co-ordinator  
Dr. S. Vijayachitra  
Professor & Head

Dept. of Electronics & Instrumentation Engg.  
Kongu Engineering College  
Thoppupalayam (Po)  
Perundurai, Erode - 638 060

Place: PERUNDURAI  
Date: 23.11.2020

  
Head of the Institution  
(Registrar / Principal / Director)

Seal of the Institution

PRINCIPAL  
KONGU ENGINEERING COLLEGE  
THOPPUPALAYAM (PO)  
PERUNDURAI (TK), ERODE - 638 060  
TAMILNADU, INDIA