

A Five Day  
National Workshop  
on  
**Neural Network and Deep Learning**  
( 29/07/2019 To 02/08/2019 )



Organized By  
Department of Embedded Technology  
School of Electronics Engineering  
Vellore Institute of Technology  
Vellore- 632 014

## ADVISORY COMMITTEE

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## NEURAL NETWORK AND DEEP LEARNING

Neural Network and Deep Learning (NNDL), at VIT Vellore, India is a five days workshop providing opportunities to spread the fundamentals of artificial neural network and deep learning. NNDL five days workshop is also envisioned to provide hands-on sessions on CNN, and RNN. It provides a unique opportunity to interact with the neural network and deep learning fraternity and learn, understand, participate, and contribute to deep learning using various algorithms, image acquisitions and vision solutions. One of the solitary objectives of NNDL is to bring up education, engineering, and science with computing through the medium of deep learning.

Neural network and deep learning is a rapidly growing area of artificial intelligence which deals with analysis and design of automated computer-based algorithms for yielding efficient representations of data at various abstraction levels. Deep learning is attaining unparalleled levels of accuracy to the extent that the deep learning algorithms are able to overtake humans at classifying images and speech. This workshop will facilitate deep learning and neural network researchers, professors and industry executives to share their expertise and knowledge with participants. It will offer a collaborative forum for discussion on recent and on-going developments, key issues and challenges, and practices in neural network and deep learning.

## SCHOOL OF ELECTRONICS ENGINEERING

School of Electronics Engineering (SENSE) at Vellore Institute Technology was established for imparting state-of-the-art knowledge in Electronics and Communication Engineering and allied areas. B. Tech. Electronics and Communication Engineering is accredited by the Engineering Accreditation Commission of ABET. All eligible students are placed on campus and many of them are placed in core companies every year. The school has set up laboratories with excel-lent infrastructure in the areas of Electronics, Communication, VLSI, Embedded, Sensors and Nanotechnology. Students are encouraged to take up their final year projects abroad too. The School has many industry sponsored advanced laboratories for carrying research and development. MoUs with many foreign Universities, research organizations and Industries allow student and faculty exchange. Faculty are actively involved in R&D activities and are working on research projects funded by government organizations like DRDO, ISRO (RESPOND), BRNS and agencies like DST.

## SESSION DETAILS

### Day 1 [29/07/2019]

- Python programming concepts
- Numpy
- Scipy
- Matplotlib
- PyLab libraries.

### Day 2 [30/07/2019]

- Fundamentals of neural networks
- Convolutional neural network design and implementation

### Day 3 [31/07/2019]

- Recurrent neural network design architectures
- Demonstration of RNN based systems

### Day 4 [01/08/2019]

- Real time image acquisition in industrial environments
- Image processing operations for reliable imaging system design

### Day 5 [02/08/2019]

- Python Programming
- Objects in python
- Loop constructs

## RESOURCE PERSONS

**Ms. Vaishali T**

*R&D Engineer*

**Mr. Deepan Raj**

*Embedded Software Engineer*

**Dr. Mohanraj Vengadachalam**

*Data Scientist*

**Mr. Ajay Kumar**

*Founder*

*Cognibot*

*Bengaluru, India*

**Dr. Hemprasad Patil**

*Assistant Professor*

*Vellore Institute of Technology,*

*Vellore, India*

## VENUE

Kamaraj Auditorium,  
Technology Tower, 7th Floor,  
Vellore Institute of Technology,  
Vellore-632014, Tamil Nadu

## REGISTRATION FEE

Faculty / Industrial Person (External)	: INR 2000/-
Student / Research Scholar ( External)	: INR 2000/-
Student / Research Scholar ( Internal)	: INR 2000/-
Faculty (Internal-VIT)	: INR 2000/-

## REGISTRATION FORM

For registration please visit the below link:

<http://info.vit.ac.in/events-vit/NNDL-2019/apply.asp>

Last date for registration: 28-07-2019

Kindly send the scanned copy of registration form and registration payment receipt to the coordinator by email