



**AICTE-ISTE SPONSORED  
INDUCTION/REFRESHER PROGRAMME**



# Data Analysis using Deep Learning

Slot 1: 02 – 07 November, 2020

Slot 2: 16 – 21 November, 2020

Slot 3: 14 – 19 December, 2020

Organized by  
*Department of Information Technology*



Estd : 1984

**NATIONAL  
ENGINEERING  
COLLEGE**

K.R. NAGAR, KOVILPATTI

(An Autonomous Institution, Affiliated to  
Anna University – Chennai)

**NIRF2020 Rank 189**

**ARIIA2020 Rank Band 'A' (06-25)**

## About NEC

- ❖ National Engineering College, an academic eden sprawl over 150 acres on the National Highway (NH7) between Madurai and Tirunelveli has marked its pride since 1984 with the deep insight of the chivalrous philanthropist Thiru K.Ramasamy, Chairman, National Educational and Charitable Trust.
- ❖ Affiliated to Anna University, Chennai and granted autonomy in the year 2011 by UGC.
- ❖ All the UG courses are accredited by NBA, New Delhi and the institution is accredited by NAAC, UGC, Government of India.
- ❖ The Institution is imparting quality technical education in 7 UG and 6 PG programmes.
- ❖ All departments are recognized as Research Centers for conducting Ph.D., programmes by Anna University, Chennai.
- ❖ R&D projects sponsored by DST, BRNS, DRDO, IGCAR, AICTE, CSIR, MHRD and ICMR are conducted in our college.
- ❖ The college has been accorded with DST –FIST (Level 0) in 2018, by Department of Science and Technology, Government of India, New Delhi and sanctioned amount is Rs. 43 Lakhs.



## About IT Department

The B.Tech Information Technology programme was started in the year 2001. The Department has stable and experienced staff members. The department is well equipped with MODERN laboratories and has been funded for projects & seminars from various Government sectors like AICTE, DSI, DBT, ICMR, DRDO, CSIR etc. This department is fully accommodated with modern Hardware and Software accessibility to cater to the academic needs of students and staff. The entire campus is connected through OFC and sophisticated WiFi Internet facility is provided for academic and research work. The faculty members are actively engaged in research activities in the areas like Mobile Ad-hoc Networking, Parallel Computing, Cloud Computing, Data Mining, Wireless Communication and Network security.

## Aim

*This AICTE-ISTE induction/refresher programme enhances knowledge and skills of students /research scholars /faculty /scientists in active research, in the area of Data Analytics, Deep Learning and related technologies.*



## About the Programme

Deep learning has in recent years attracted a lot of attention in both academia and industries, as it has been proved to be very useful in a wide range of domains, ranging from Big data Analytics, computer vision, natural language processing, speech recognition to game playing. Deep Learning algorithms have great potential for research in the automated extraction of complex data representations. Deep Learning algorithms can develop a layered, and hierarchical architecture of learning and representing data. Deep Learning in Big Data Analytics has become a high-focus of data science. Big Data has now become important as several organizations are collecting massive amount of domain-specific information that can be used to solve problems related to national intelligence, cyber security, fraud detection, marketing, and medical informatics. Deep Learning in Big Data allows extraction of high-level, complex abstractions as data representations through a hierarchical learning process. A key benefit of Deep Learning is Big Data analysis that it can learn from massive amount of unsupervised data. This makes it a valuable tool for Big Data Analytics where huge amount of raw data are uncategorized. Big Data presents significant challenges to deep learning, including large scale, heterogeneity, noisy labels, and non-stationary distribution, among many others.

## Topics



- Data Analytics
- Exploratory Data Analysis
- Artificial Neural networks
- Deep learning in Big data Analytics
  - (a) Incremental data (b) High dimensional data (c) Large Scale model
- Basics of Text processing using Naive Bayes
- Deep Learning and Cross-Media Methods for Big Data Representation
- Emerging trends in biometric recognition
- Large-scale multimodal data acquisition techniques
- Deep learning methods for applications in object detection and identification, object tracking, human action recognition, cross-modal and multimodal data analysis
- High performance Computing systems for applications in Finance, Autonomous driving, Healthcare and recommendation
- Hyperspectral data analysis and intelligent systems

In order to realize the full potential of Big Data, we need to address these technical challenges with new ways of thinking and transformative solutions. The refresher Programme will focus the research challenges posed by Big Data and will also bring ample opportunities for deep learning. Altogether, they will provide major advances in science, medicine, and business.

## Resource Person

Eminent personalities from premier institutions such as IITs, NITs, R&D center and reputed industries.

## Eligibility

Faculty members and researchers of AICTE approved Colleges and delegates from Industries are eligible to attend this programme.

## Registration

- **No Registration Fee**

### Slot 1

**Last date for registration : 24.10.2020**  
**Intimation of selection : 27.10.2020**  
**Confirmation by participants: 30.10.2020**

### Slot 2

**Last date for registration : 09.11.2020**  
**Intimation of selection : 11.11.2020**  
**Confirmation by participants: 13.11.2020**

### Slot 3

**Last date for registration : 05.12.2020**  
**Intimation of selection : 09.12.2020**  
**Confirmation by participants: 11.12.2020**

**Registration URL:**

**<https://forms.gle/Tf9nyT2sBY9kyTjv9>**

- **Participants can participate in any one of the three slots**
- **The number of participants is limited to 100 and the participants will be selected on First come First serve basis.**
- **Details related to registration, confirmation and meeting link will be shared through registered e-mail.**
- **For any queries mail to [necdausingdl@gmail.com](mailto:necdausingdl@gmail.com) and you can contact us in 9940894402, 9787390117.**

## Certificates

Certificate will be issued to the participants who attend all the sessions and qualify in the test to be conducted at the end of the programme.

# Committee

## Convener

### **Dr. D. Manimegalai, M.E. Ph.D.**

Professor & Head,  
Department of Information Technology,  
National Engineering College  
K.R. Nagar, Kovilpatti,  
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## Organizing Secretary

### **Dr.S. Vimal, M.E., Ph.D.**

Assistant Professor (Senior Grade),  
Department of Information Technology,  
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## Coordinator

### **Dr. V. Jackins, M.E., Ph.D.**

Assistant Professor (Senior Grade),  
Department of Information Technology,  
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Tamilnadu – 628 503

### **Registration URL**

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### **Scheduled**

# 3

**Sessions  
per day**

### **For details visit**

<https://nec.edu.in/>

