

**AICTE Sponsored Six Days ONLINE  
SHORT TERM TRAINING PROGRAMME**

**ON**

# **DEEP LEARNING AND ITS APPLICATIONS USING TENSORFLOW AND KERAS**

## **REGISTRATION DETAILS**

Registration fee: **NIL**

Register @  
<https://forms.gle/xjy1Mkndn24FbVvx9>

Last date for Registration: **15/7/2020**

Intimation of selection : **16/7/2020**

**The participants have the option to choose  
any one of the following three slots.**

**Slot-1: 20 July 2020 to 25 July 2020**

**Slot-2: 03 August 2020 to 08 August 2020**

**Slot-3: 17 August 2020 to 22 August 2020**

**Participants will receive E-Certificate  
after attending Six Days of Program,  
Submission of Feedback Form and  
attending Exam in the final day of the  
programme.**

### **Chief Patron**

Shri. R.S Munirathinam Founder and Chairman

### **Patrons**

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Shri. R.Jothi Naidu Director  
Shri. R.M. Kishore Vice- Chairman  
Shri. Yalamanchi Pradeep Secretary  
Dr. Durgadevi Pradeep Vice- Chairperson  
Smt. Sowmya Kishore Management Trustee

### **Advisory Committee**

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Thiru.T. Pitchandi, I.A.S. (Retd.) Advisor  
Shri.V. Manoharan Advisor  
Dr. K.A. Mohamed Junaid Principal  
Dr. K. Chandrasekaran Dean  
Dr.Elwin Chandra Monie Dean-Research

### **Convenor**

Dr.T.Sethukarasi M.E., Ph.D Professor and Head

### **Co-ordinator**

Dr.B.Jaison M.E.,Ph.D Associate Professor

### **Organizing Committee**

Dr.Sandra Johnson M.E.,Ph.D Professor  
Dr.C.Geetha M.E., Ph.D. Associate Professor  
Dr.S.Selvi M.E., Ph.D Associate Professor  
Dr.A.Thilagavathy M.E.,Ph.D Associate Professor

### **Address for Communication**

Dr.B.Jaison M.E.,Ph.D  
Associate Professor  
Department of Computer Science and Engineering  
R.M.K. Engineering College  
R.S.M Nagar Kavaraipettai, Gummidipoondi Taluk  
Thiruvallur Dist-601206  
Mobile:9840024357  
E-Mail: [bjn.cse@rmkec.ac.in](mailto:bjn.cse@rmkec.ac.in)



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# **DEEP LEARNING AND ITS APPLICATIONS USING TENSORFLOW AND KERAS**



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*Organized by*

**DEPARTMENT OF  
COMPUTER SCIENCE AND ENGINEERING**

**R.M.K ENGINEERING COLLEGE**

R.S.M Nagar Kavaraipettai – 601206, Gummidipoondi Taluk, Tiruvallur District.  
Affiliated to Anna University, Chennai / Approved by AICTE, New Delhi  
Accredited by NAAC with A+ Grade / ISO 9001:2015 Certified Institution  
All UG Programmes are accredited by NBA, New Delhi.

## About the Institution

R.M.K. Engineering College started in the year 1995, has been achieving Academic Excellence for the past 24 years. Our Institution has always been in top 10 positions among all the Engineering colleges affiliated to Anna University and also has maintained excellent placement record. In 2008, the College was conferred Bhartiya Vidya Bhavan National Award for its Overall Performance followed by the "Best Principal" Award in the year 2012, by the Indian Society for Technical Education (ISTE) New Delhi. Our College is accredited by NAAC with A+ Grade for 5 years and NAAC has approved our Institution to mentor 10 institutions for NAAC accreditation. All the 7 UG programmes are accredited by NBA. Our Institution is ranked 155<sup>th</sup> in the NIRF ranking under the Engineering institutes category in the year 2020 and was ranked 6<sup>th</sup> across the country in SWACHHTA 2017 ranking by MHRD, Govt. of India. The College has been rated four-star rating under Institution Innovation Council (IIC) MIC, MHRD, Govt. of India. In the AICTE – CII survey our Institution has been awarded, the Best Industry linked Technical institute for Electronics Engineering & Allied (Degree) in the year 2015, Computer and IT Engineering & Allied (Degree) in the year 2018 and Mechanical Engineering & Allied (Degree) in the year 2019.

## About the Department

The Computer Science and Engineering Department was started in the academic year 1997-1998 with an annual intake of 120 students. The B.E. program has been accredited by the National Board of Accreditation (NBA) in the year 2006 and again in 2013 and 2018 respectively. The Department is a recognized Research Centre of Anna University. 30 Research scholars have been awarded PhD degree under the research centre so far. The Department has all the necessary laboratories pertaining to the curriculum of Anna University, Chennai. The Department has received AICTE-CII award for Best Industry linked Computer & IT Engineering institute in the year 2018 under Platinum category and CSI best student chapter award during the year 2015-16, 2016-17 and 2017-19 consecutively.

## Centre of Excellence

There are five industry sponsored centers of Excellence (COEs) like Artificial Intelligence COE, Bigdata COE, Information Security COE, Cloud Computing COE and Front-End Engineering COE. These COE's provide specialized training to students in recent technologies.

## About the FDP

Deep Learning is the most sought after technology in industries and academia with the advent of high end processors, unstructured Big Data and Ubiquitous Computing. The FDP aimed to equip the participants with deep learning knowledge with hands on training that can help academicians and research scholars to develop their skills in the cutting edge technology of deep learning and the blend of science with technology.

## Objective of the FDP

This FDP will provide an understanding of Deep Learning concepts and skills required to develop and use deep neural network models using the Open Source TensorFlow platform. Participants will gain a deeper understanding of the Python programming language and NumPy library. The FDP will also provide a concise introduction to the mathematics required for a broader understanding of Machine Learning vis-à-vis Linear Algebra, Probability Theory and Multivariable Calculus.

## Course Contents

**Open source API libraries for Machine / Deep learning**

**Introduction to Tensor flow and its applications**

**Getting started with Tensor flow – Basics and setup Loading and accessing data for Tensor flow**

**Brief introduction to Classification problems Basics of Neural network and Deep learning Architecture**

**Deep Learning with Tensor flow Convolution Neural Network with Tensor flow**

**A Brief introduction to Text Classification Text Classification using Tensor Flow**

**Brief introduction to Logistic regression**

**Logistic Regression in Tensor Flow Case-study example -Real world Case study using Tensor Flow**

**Implementing dense layers in TensorFlow**

**Implementing Convolution networks using TensorFlow**

**N-Dimensional array manipulation using NumPy**

**Implementing Linear Regression and Logistic Regression using NumPy**

## Resource Persons

**Thiru. Lawrence Mohanraj**

General Manager-Academic Initiative  
IBM India Pvt Ltd.

**Thiru. V Sasikumar**

Senior Software Engineer  
Walmart labs, Bangalore.

**Mr.G.Nagarajan**

Head, R& D Division  
Solvedge, Chennai

**Dr.Ganapathy**

School of Computer Science and Engineering  
VIT Chennai

**Dr. T.Senthil Kumar**

Computer Science and Engineering,  
Amrita Vishwa Vidyapeetham  
Coimbatore.

**Dr. M. Lakshmi, Professor & Head**

Department of AI & Deep Learning  
Saveetha School of Engineering,

**Dr.Xavier Chelladurai**

Professor, Christ University, Bangalore

**Mohamed Kedir Noordeen**

Machine Learning Researcher and Developer  
Zoho Corporation, Chennai

## Eligibility for Participation

This course is open to Faculty Members and Research scholars of AICTE approved Engineering Colleges, Polytechnic Colleges, and Engineers from R&D organizations and Industries.