

(ISO 9001:2015 Certified) Accredited with 'A' Grade by NAAC

## Department of

## Electronics & Communication Engineering

A THREE DAY FDP ON

# Advanced Topics in Machine Learning & Applications in Engineering & Technology

October 26th to 28th 2018

REGISTRATION FORM

NAME

DESIGNATION

DEPT.

NAME OF THE INSTITUTION

MOBILE

**EMAIL** 

PLACE DATE

SIGNATURE OF APPLICANT

SIGNATURE OF THE HEAD OF THE INSTITUION

Note: Send the scanned copy of the duly filled Registration Form to **sbhat22@nitte.edu.in** 

Payment shall be remitted through Electronic Fund Transfer Facility to

Account Holder : Principal, NMAM Institute of Technology, Nitte

Account Type: SB, Account No.: 01152200033493

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## **Chief Patron:**

Sri N. Vinaya Hegde President, NET

## Patron:

Dr. Niranjan N. Chiplunkar Principal

## Convener:

Dr. Rekha Bhandarkar Professor & Head

## **Organizing Secretary:**

Dr. Subramanya Bhat

## **Joint Organizing Secretary:**

Dr. K. S. Shivaprakasha Smt. Ashwini

#### **Contact Details:**

## Dr. Subramanya Bhat

Associate Professor

Dept. of E&C, NMAMIT, Nitte

sbhat22@nitte.edu.in , 9916026580

#### Dr. K. S. Shivaprakasha

Associate Professor

Dept. of E&C, NMAMIT, Nitte

shivaprakasha.ks@nitte.edu.in , 9448324481





## N.M.A.M. Institute of Technology

Nitte - 574110

(An Autonomous Institution Under VTU, Belagavi)
(A Unit of Nitte Education Trust)
Karkala Tq., Udupi District, Karnataka.
Phone: 08258-281264 Fax: 08258-281265

A THREE DAY
FACULTY DEVELOPMENT PROGRAM
on

Advanced Topics in Machine Learning & Applications in Engineering & Technology

October 26th to 28th 2018



Jointly Organized by

Department of Electronics and
Communication Engineering
&
Department of Information Science and

Department of Information Science and Engineering

#### About the Institute:

N.M.A.M. Institute of Technology, Nitte, an autonomous Institution under Visvesvaraya Technological University (VTU), Belagavi was established in the year 1986 in the memory of Nitte Mahalinga Adyanthaya, a distinguished engineer of the erstwhile Dakshina Kannada district in Karnataka. It is one of the constituent Institutions under Nitte Education Trust, Mangalore, which runs 26 Institutions in various areas of education right from primary school to post-graduation centers, including professional courses like Engineering, Management, Medical, Nursing, Dental, Paramedical and others. Nitte University, a NAAC accredited A-grade University is run by the Nitte Education Trust founded by late Justice K.S. Hegde, a well-known judge of Supreme Court of India and former speaker of Indian Lok Sabha. The institute is also Accredited by NAAC with 'A' grade. The institution is ISO 9001:2015 certified from NVT Quality Certification (ANAB Accredited). All undergraduate programs of the institution have been accredited by National Board of Accreditation (NBA). The Institute is having MOUs for research and project collaborations with Pennsylvania State University, USA, Ritsumeikan University, Japan and National University of Singapore, Singapore.

NMAM Institute of Technology, Nitte offers undergraduate programmes and postgraduate programmes in seven branches of engineering viz: Bio-Technology, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering, Information Science & Engineering and Mechanical Engineering. All departments have also been recognized as research centers for offering M.Sc. (Engg.) & Ph.D. programmes under VTU. The Institute also offers postgraduation and research programmes in Computer Applications and Business Management and Ph.D. programmes in Basic Sciences and Mathematics.

The Institute is located on the Padubidri-Karkala State Highway which is well connected with Mangalore (60 km) and Udupi/Manipal (45 km) through NH66 & NH169. The participants can alight at Mangalore or Udupi Railway Stations/Bus Terminals, or Mangalore Airport to reach the Institute.

#### **About the Departments:**

Established in 1986, the Department of Electronics & Communication offers an Undergraduate Program with an intake of 180 students and Two Postgraduate Programs in Digital Electronics & Communication Engineering with an intake of 25 students and VLSI Design & Embedded Systems with an intake of 18 Students. The department is well-equipped with modern laboratories and has well-qualified and experienced faculty members.

Department of Information Science & Engineering was established in 1999. The Department offers an Undergraduate Program with an intake of 120 students and one Postgraduate Program in Computer Network Engineering. The department is well-equipped with modern laboratories and has well-qualified and experienced faculty members.

#### About the workshop:

The resource persons will be covering topics like:

- Introduction to Neural Networks and concepts in its ecosystems
- Handson session on PyTorch
- Advanced Subspace methods in Machine Learning
- Ensemble of classifiers which included Bagging and Boosting, w r t homogeneous and heterogeneous classifiers
- CNN / RNNs and ResNETS
- Training and parameter optimization of Neural Networks
- Hands on training NNs (in Keras/Tensorflow)
- Deep neural networks for computer vision tasks (Object detection, localisation, segmentation, etc.)
- Deep generative models (Auto-encoders, GANs, etc.)
- Architecture and Programming of GPUs

#### About the Speakers:



Dr. Ashok Rao holds a B.E., M.E. & Ph.D. all in Electrical Engineering from Mysore University (1982), Indian Institute of Science, Bangalore (1985) and Indian Institute of Technology, Bombay (1991) respectively. He specializes in Digital Signal Processing area and is known to be one of the leading figures in this area in India. In addition he teaches

and researches in areas of Image Processing, Multimedia, Linear Algebra, Renewable Energy, Bio-Metrics, Appropriate Technology & Sustainable Development, Management, Archeology, Education & Academic Reforms and ICT.

He has over 30 years of Teaching & Research Experience which Includes: 6 years in IIT Bombay, 7 years in IISc Bangalore , 4 years in NITK Surathkal, the rest in various places in India, Guided Ph.D's both in E & C and Comp.Sci areas and has over 100 publications. He is also a Solar Photo Voltaic (SPV) specialist having been trained by Siemens Solar California during 1996-1997. Earlier he was Head, Network Project at CEDT, IISc Bangalore from 1999-2005. It was a project funded by SDC (Swiss Agency for Development & Co-operation) and covered E & C Engineering education in whole of South India (Karnataka, Tamilnadu , Andhrapradesh & Kerala). He is also an Entrepreneur having successfully started and managed several IT & Renewable Energy companies during 1998 to 2011.



Dr. Mohammad Imran holds a Ph.D from University of Mysuru and post doctoral degree from Ministry of Higher Education, College of Applied Science, Sohar Oman. 5+ Years of experience in Research and development in the area of Machine learning. A software engineering and scientific leader and manager. His focus is on implementing data mining

and machine learning systems that solve real business problems. He is also an expert in statistical and linguistic methods for data mining, information extraction, classification and clustering. He was an Associate Consultant WIPRO Technologies, Bengaluru. Currently he is working as an Assistant Professor, College of Computer Science and IT, Saudi Arabia. His research areas include Machine learning, Pattern Recognition, Computer Vision, Biometrics, Image Processing, Predictive analysis, Algorithms, Data Structure, Linear Algebra.



Dr. Deepu Vijayasenan, holds a Ph.D. from EPFL, Lausanne and Post-Doctoral Degree f rom University of Saarbreucken, Saarland. Currently he is working as an Assistant Professor in Dept. of E&C, NITK, Surathkal since Jan 1, 2013. His main interests include machine learning and speech signal processing.



Dr. Prasad Sudhakara Murthy is currently a Lead Scientist in the Artificial Intelligence & Computer Vision (AICV) Lab at GE Global Research, Bengaluru, India. Prior to this, he spent nearly 3 years in the ICTEAM institute, Universite catholique de Louvain, Belgium, with Prof. Laurent Jacques during his postdoc. He obtained Ph.D. (2011) from INRIA Rennes - Bretagne Atlantique (associated with Universite de Rennes 1), France, under the supervision of Dr. Remi Gribonval. Before obtaining M.Sc. (Engg.)

degree (2007) from the Electrical Engineering department, IISc, Bangalore, he spent about 3 years in industry developing signal processing algorithms.



Dr. Satyadhyan Chickerur received his B.E degree in E&C, M.Tech in CSE and PhD in Computer and PhD in Computer and Information Sciences. He has served as faculty in various engineering colleges in India. Presently he is with the Department of Computer Science and Engineering, KLE Technological University (Formerly B V Bhoomaraddi College of Engineering and Technology), Hubli as a Professor and PI of

He is one of the members of NVIDIA University Relations Coordination Committee. He is also a NVIDIA DLI certified Instructor. He is a member of ISTE, IEEE and ACM. He was the Execom member of IEEE signal processing society, Bangalore chapter (2007-2009). He was a Member of Intel - IISC - VTU multicore Curriculum Development committee. He was one of the judges and problem setter for ACM ICPC programming contest of the Asia Regional's in the year 2007 and 2008. He has received various grants from industry and other Organizations for research as well.



Mr. Sandesh holds a B.E. and MTech in Computer Science from SJCE, Mysore and Indian Institute of Technology, Delhi repectively. He is currently a Research Scholar in Chennai Mathematical Institute, Chennai, working on Machine Learning. He has roughly 5 years of working experience in the IT industry and has worked in the fields of Electronic Design Automation(EDA) and Online Education.

#### Registration Fee:

Faculty, Research Scholars: Rs. 1,500 /-

People from Industry: Rs 2,000/-

Last date for Registration - October 10th 2018

(Limited to 30 seats)

#### Accommodation:

Accommodation will be arranged on prior request for nominal charges.