

## REGISTRATION FORM

*5-Day TEQIP-III Sponsored Workshop on*  
**"Artificial Intelligence and Machine Learning  
Applications in the Emerging Areas of  
Computer Science and Information  
Technology"**  
(Dec. 9, 2019 to Dec. 13, 2019)

Name of Participant -----

Dept :-----

Gender :-----

Designation:-----

Qualification :-----

Organization:-----

Mobile No.-----

Email:-----

Demand Draft No.-----

I agree to abide by the rules and the regulations governing the Workshop.

Place:  
Date: *Signature of the Participant*

Mr./Ms./Dr./\_\_\_\_\_ is  
a student/employee of our Institution and is permitted  
to attend the 5-Day Workshop at NITK Surathkal.

Signature of the Head of (applicant's) Institution  
and Seal

Place:

Date:

**Accommodation:** Limited number of rooms in NITK Guesthouses and Hostels available on First-come First-served basis. The cost of boarding and lodging shall be borne by the applicant. No TA/DA shall be paid to the participants for this event by NITK.

**Venue:**  
*Seminar Hall  
Dept. of Information Technology,  
NITK Surathkal, Mangalore - 575025.*

### *Address for Communication*

*Dr. Kiran M  
Dr. Bhawana Rudra  
Dr. Anand Kumar M*

*Department of Information Technology  
National Institute of Technology Karnataka  
Surathkal, Mangalore – 575 025*

**E-mail:** *aiml2019.it.nitk@gmail.com*

**Phone Contact:** 9886539400, 0824-247-3560,  
0824-247-3118

### Workshop Contents

- *Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) Difference and Overview.*
- *Behavioral Analysis, Reinforcement Learning, Smart City, Smart Classroom, Smart Home and IoT.*
- *Applications of AI, ML, and DL in Computer Networks and Network Security.*
- *ML and DL Research Trends in Natural language Processing and Computer Vision.*
- *ML Applications in Healthcare Analytics and Stock Market Predictions.*

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Coordinators

**Prof. G. Ram Mohana Reddy  
Dr. Kiran M  
Dr. Bhawana Rudra  
Dr. Anand Kumar M**



**Diamond  
Jubilee  
Celebration  
Year (2019-20)**



*Organized by*

Department of Information Technology  
National Institute of Technology Karnataka  
Surathkal, Mangalore – 575 025.

## About NITK Surathkal

NITK Surathkal is a premier institution engaged in imparting quality technological education and a broad range of research, development and consultancy activities. NITK has carved a niche for itself among the best technical institutes in India and is consistently ranked among the top 10 technological institutes.

## How to Reach NITK Surathkal

NITK is located in Surathkal on the scenic shores of the Arabian Sea, about 20KM north of the city of Mangalore and is well connected by Air, Rail and Road. The nearest domestic/international airport is situated at Bajpe (about 10KM from Mangalore) and the nearest railway station is Surathkal (3 KM). The NITK Campus is situated right on National Highway NH66 with very good bus connectivity from Mangalore, Udupi etc.

## Department of Information Technology

Department of Information Technology was established in June 2000, The department offers undergraduate course on B.Tech. in Information Technology, Post Graduate course on M.Tech. in Information Technology, M.Tech. by (Research) and Doctoral Program (Ph.D). Current research activities of the department include Data Mining, Web services, Distributed Computing, Semantic Web Technology, Natural Language Processing, Software Aging, Virtualization, Soft Computing, Wireless Sensor Networks, Computer Networks, Network and Cyber Security, Information Security, Internet of Things (IoT), Affective Computing, Big Data Analytics, Cloud/Edge/Fog Computing, Cloud Security, Databases, Healthcare Informatics, High Performance Computing, Information Retrieval, Social Multimedia/Social Network Analysis, Software Engineering, Blockchain Technologies, Future Internet Architecture, Mobile Software Engineering, Deep Learning Applications.

## About the Program

Artificial Intelligence (AI), as the name itself indicates, is a method of training the computer through artificial facts and figures in order to make the system intelligent and hence to take decision independently and appropriately. An AI trained system behaves just like human being and does not need human intervention. Also an AI trained system will find optimal solution to a problem under different circumstances. Hence, makes the system smart.

On the other hand, Machine Learning (ML) is the process of making a system to learn by experience. ML trained system explores and learns on its own without any explicit inputs or programs. Over a period of time, ML trained system becomes more and more skillful by exploring and exploiting different situations and the decisions taken just like humans. ML leads to knowledge where as AI leads to wisdom.

Deep Learning (DL), a ML technique, teaches system to learn by the examples. It is gaining much popularity as it brings system one step closer to the human thinking and behavior. Reinforcement Learning, another ML technique, trains the system to take suitable actions to maximize the reward for a particular situation. Reinforcement Learning ensures that the system will behave in the best possible way in a specific environment.

In the recent research development, one can find diversified applications of AI, ML and DL in different fields of computer science and information technology; IoT, Data Science and Computer Network to name a few. As a need of the day, this workshop targets different AI, ML and DL applications in the field of Internet of Things (IoT), Data Science, Computer Networks and Network Security. ML has also made headlines in healthcare analytics where a system will be trained in a such a way that it can diagnose the medical images. ML has improved the efficiency, accuracy and reliability in medical image diagnosis. Another application of ML is in stock market prediction where based on the trained data the system can predict the ups and downs of market in the near future. Further, ML has also found its own position in the smart city, smart classroom, smart home applications.

## Objectives of the Program

- \* To enhance the knowledge of participants in the field of AI, ML and DL.
- \* To intensify the knowledge of participants in different applications of AI, ML and DL in Computer Science and Information Technology domains.
- \*To expose participants to the recent research developments in Computer Science and Information Technology areas w.r.t AI, ML and DL through open discussion forum.

## Resource Persons

Experts from Industry , Academia and R&D Organizations will deliver expert talks to make participants aware of various topics related to AI, ML and DL applications in IoT, Data Science, Computer Networks and Security, NLP and the corresponding research challenges .

## Eligibility

The programme is open to Faculty and Students (B.Tech, M.Tech and Ph.D) of AICTE/UGC approved Engineering and Technology Institutions. Number of participants will be limited to 40.

## Registration Fee

Amount+GST	Participants
1500+18%	Research Scholars/Students
2500+18%	Faculty Members
5000+18%	Industry Persons

Demand Draft should be drawn in favor of  
**"Director NITK Surathkal"**

Participants are requested to register in the below link.

<https://forms.gle/xk8sfvV9jiqu9HDZ9>

The scanned copies of the filled and duly signed application form along with DD should be e-mailed to:

*aiml2019.it.nitk@gmail.com*

## Important Dates

Last Date for Receipt of Applications:

**20<sup>th</sup> Nov 2019**

Intimation of Selection by email:

**25<sup>th</sup> Nov 2019**