# **REGISTRATION FORM**

5-Day Workshop on

"Artificial Intelligence and Machine Learning
Applications in the Emerging Areas of
Computer Science and Information
Technology"

(Dec 9th, 2019 to Dec 13th, 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 programme.
Signature of the Head of (applicant's) Institution and Seal

Place:

Date:

Accommodation: Limited number of room in NITK Guesthouses and Hostels available on First Come First Served basis. 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:

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

Contact: Ph. 9886539400, 0824-247-3560, 0824-247-3118

Course Contents

- Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) Difference and Overview.
- Behavioral Analysis, Reinforcement Learning, Smart City, Smart ClassRoom and Smart Home.
- Applications of AI, ML, DL in IOT and Data Science.
- Applications of AI, ML and DL in Computer Networks and Network Security
- AI, ML and DL Research Trends Road Ahead
- ML Applications in Healthcare Analytics.
- ML Applications in 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



# 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 B.Tech. in Information Technology, Post Graduate course 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 decision taken. 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

- $^{\star}$  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, Network Security 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 Colleges. Number of participants will be limited to 40. Completed applications should reach the Coordinators on or before 20<sup>th</sup> Nov 2019.

## Registration Fee

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

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

aiml.workshop@gmail.com

Important Dates

Last Date for Receipt of Applications:

20th Nov 2019

Intimation of Selection by email:

1st Dec 2019