

# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

## Department of CSE & IT

<b>Title of the activity:</b>	National workshop on “Recent Trends In AI, Deep Learning And Its Applications”
<b>Date:</b>	28 – 29 Sept., 2019
<b>Brief description of the activity:</b>	In today's world, field of Artificial Intelligence is playing an important role in solving wide variety of real world problems. The use of deep learning further enhances the applications of artificial intelligence. So, in this regard a national workshop was conducted by the department of CSE & IT to explore the techniques, tools and applications of AI and deep learning.
<b>Objectives of the activity:</b>	<ul style="list-style-type: none"><li>• Motivate and equip the participants with the basics as well as the recent trends in Artificial Intelligence &amp; Deep Learning, and their applications for solving wide variety of problems in various fields of engineering and technology.</li><li>• To expose the faculty members and students with the newer dimensions of the area with their practical approaches to tackle the real life problems in engineering and technology and other related disciplines.</li><li>• To take up various challenges of the present day to day societal problems for their acceptable logical solutions.</li></ul>
<b>Outcomes of the activity:</b>	After the completion of activities, participants were able to <ul style="list-style-type: none"><li>• Understand the techniques and tools used in AI and Deep Learning.</li><li>• Analyse real world problems and implement AI and Deep Learning techniques to solve the same.</li><li>• Evaluate the efficiency and efficacy of AI and Deep Learning techniques.</li></ul>
<b>Experts</b>	<ol style="list-style-type: none"><li>1. Dr. Prashant S. Rana (Thapar Institute of Engg. &amp; Tech., Patiala)</li><li>2. Dr. Mukesh Saraswat (Jaypee Institute of Info. Tech., Noida)</li><li>3. Dr. Tapas Badal (Bennett University, Greater Noida)</li></ol>
<b>Number of Participants</b>	Total Participants: 44 Internal Participants: 38 External Participants: 06 Assistant Professor: 16 Associate Professor: 01 Research Scholar: 07 Students: 20

**Dr. Akhilesh Tiwari**  
Prof. & Head

# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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## Department of CSE & IT

### APPLICATION FORM For National Workshop ON Recent Trends in AI, Deep Learning and its Applications

(28 - 29 September 2019)

Name (in capital letters): .....

Designation: .....

Department: .....

Organisation: .....

Address: .....

Mobile Number: .....

Email: .....

Signature with Date: .....

#### SPONSORSHIP CERTIFICATE

It is certified that our institute is recognised by AICTE. The applicant is hereby sponsored and will be permitted to attend the above workshop, if selected.

Date: ..... Signature and Seal

(Photo copy additional copies of this form, if needed)  
(scanned copy of registration form can also be sent by email)

#### PATRON

**Dr. R.K. Pandit**  
Director  
MITS Gwalior

#### WORKSHOP TEAM

##### Convener

**Dr. Akhilesh Tiwari**  
Prof. & Head CSE&IT  
Coordinator(s)

**Mrs. Neha Bhardwaj** (Assistant Professor)  
**Mr. Arun Kumar** (Assistant Professor)

##### Organizing Secretary

**Ms. Aishwarya** (Assistant Professor)  
**Mr. Mir Shah Nawaz Ahmad** (Assistant Professor)  
Organizing Committee

Ms. Shweta Patel	Mr. Sheo Kumar
Mr. Santosh Sahu	Ms. Julie Kumari
Ms. Namrata Agrawal	Ms. Sneha Garg
Ms. Pooja Agrawal	Mr. Lav Upadhyay
Mr. Mohit Jain	

#### REGISTRATION

Faculty members, Research scholars and UG/PG students in relevant discipline of degree level technical Institution/Universities approved by AICTE are eligible to attend the course. The number of participants is limited to 50. The interested candidate needs to apply online at <https://bit.ly/2znMfDz> (on or before 21 Sept, 2019) and must bring the original application form duly signed by competent authority on 28 Sept., 2019.

#### TEQIP-III SPONSORED



#### NATIONAL WORKSHOP

ON

### RECENT TRENDS IN AI, DEEP LEARNING AND ITS APPLICATIONS

SEPTEMBER 28 - 29, 2019

ORGANIZED BY

DEPARTMENT OF COMPUTER SCIENCE &  
ENGINEERING AND INFORMATION TECHNOLOGY



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE  
(A GOVT. AIDED UGC AUTONOMOUS & NAAC  
ACCREDITED INSTITUTE, ESTABLISHED IN 1957)  
GWALIOR, M.P. - 474005

[www.mitsgwalior.in](http://www.mitsgwalior.in)

#### PREAMBLE

The field of engineering and technology is facing unparallel changes and consolidations. As educators, we must be continuously aware of these developments so that we cannot only define a fixed path but also we have to take full advancement in engineering and technology. Keeping view of the current thrust, relevance and importance of the development in engineering and technology, the faculty members of technical institute have to keep a place with its exchanging trends for social and industrial benefits. Researchers and Scientists have applied modeling and computational techniques as a tool to represent the various problems in real word situations. It is because of the wide applicability of Artificial Intelligence and Machine Learning techniques in different domains of Engineering and Technology, this Workshop is being organized with the following objectives.

- Motivate and equip the participants with the basics as well as the recent trends in Artificial Intelligence & Deep Learning, and their applications for solving wide variety of problems in various fields of engineering and technology.
- To expose the faculty members and students with the newer dimensions of the area with their practical approaches to tackle the real life problems in engineering and technology and other related disciplines.
- To take up various challenges of the present day to day societal problems for their acceptable logical solutions.

This Workshop will be helpful for faculty members and researchers to utilise methods, tools, and computational techniques for real life problems solving.

#### COURSE CONTENTS

The following topics will be covered in this Workshop:

- Introduction to Machine Learning & Deep Learning
- Convolution Networks - Basic architecture of CNN
- Applications of Deep Learning in Computer Vision, Sentiment Analysis, Data Analysis, and Rumor Analysis, Social Behavior, Object Recognition etc.
- Visualization, Data Pre-Processing, Classification and Regression Analysis.
- Hands on Machine Learning using R

#### RESOURCE PERSONS

The Resource Persons for the Workshop will be Eminent Professors and experts from IITs, IIITs, NITs, and other esteemed institutions.

#### REGISTRATION FEE

There will be no registration fee for the participants from AICTE recognized institutions

#### CONTACT US AT:

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**Mr. Mir Shah Nawaz Ahmad**  
+91-7006080550  
mirshahnawaz288@mitsgwalior.in

Registration Link: <https://bit.ly/2znMfDz>

#### ABOUT MITS

Madhav Institute of Technology and Science (MITS), Gwalior was established by His Highness Late Sir Jiwaji Rao Scindia, Maharaja of Erstwhile State of Gwalior, with an aim to create world class quality engineers and technocrats capable of providing leadership in all spheres of life and society. Founded as Madhav Engineering College in 1957 with three UG programmes, this temple of learning is now about 60 years old. Since its inception, the institute has constantly strive for excellence and quality in technical education. Today, the institute offers nine UG programmes along with research programmes leading to Masters and Ph.D. degree in various specializations of engineering and technology. All the departments of the institute have well equipped laboratories and experienced faculties. The institute is a minor QIP centre of AICTE for Ph.D. programme in five disciplines. The institute is also funded by World Bank under TEQIP phase III to strengthen the quality of technical education.

#### LOCATION

Gwalior city has major road and rail connectivity. The Institute is located on Agra-Bombay Road (NH-3) and is approximately 320 KM from Delhi. The institute is located in the heart of city and is at a distance of about 2 km from Gwalior Bus Stand/Gwalior Railway Station.

#### ABOUT THE DEPARTMENT

The department of CSE & IT has an excellent & rich history and an outstanding record of contributions to the profession and community. The department is well recognized for excellence in facilities and teaching. The Department offers UG, PG and Ph.D. Programmes in Computer Science & Engineering and Information Technology. The Department has a comprehensive curriculum on topics related to all aspects of Computer Hardware and Software with an emphasis on practical learning. The course structure is up-to-date and includes courses on emerging topics to equip our students with the latest developments in Computer Science and Engineering. The Department has state-of-the-art infrastructure and computing equipment supported by high speed Ethernet and wireless networks. Our faculty members aim at delivering world class education by providing rich, research experience and classroom teaching.

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Department of CSE & IT

## Activity Schedule

**Madhav Institute of Technology and Science, Gwalior**

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

**Department of Computer Science & Engineering and Information Technology**

Two days National workshop on "**Recent Trends in AI, Deep Learning and its Applications**"  
under TEQIP – III, held at MITS Gwalior (September 28 – 29, 2019)

### Workshop Schedule

Day – 1: 28 <sup>th</sup> September, 2019	10:15 to 10:45 AM	10:45 to 11:15 AM	11:15 to 11:30 AM	11:30 to 01:00 PM	01:00 to 02:00 PM	02:00 to 03:30 PM	03:30 to 03:45 PM	03:45 to 05:15 PM
	Registration	Inauguration	High Tea	<b>Session 1</b> "Introduction to Machine Learning & Data Mining" By Dr. Prashant S. Rana Thapar Institute of Engg. & Tech., Patiala	Lunch Break	<b>Session 2</b> "Problem solving in R with Hands-on" By Dr. Prashant S. Rana Thapar Institute of Engg. & Tech., Patiala	High Tea	<b>Session 3</b> "Research directions in Machine learning" By Dr. Prashant S. Rana Thapar Institute of Engg. & Tech., Patiala
Day – 2: 29 <sup>th</sup> September, 2019	10:00 to 11:30 AM	11:30 to 11:45 AM	11:45 to 01:15 PM	01:15 to 02:00 PM	02:00 to 04:00 PM	04:00 to 04:15 PM	04:15 to 05:00 PM	
	<b>Session 1</b> "Introduction to Deep Learning & Semantic Segmentation" By Dr. Mukesh Saraswat Jaypee Institute of Info. Tech., Noida	High Tea	<b>Session 2</b> "Hands-on session on Deep Learning" By Dr. Mukesh Saraswat Jaypee Institute of Info. Tech., Noida	Lunch Break	<b>Session 3</b> "Deep Learning Techniques & Applications And Lab session on Training & Testing of CNN model" By Dr. Tapas Badal Bennett University, Greater Noida	High Tea	Valedictory	

**Venue: IBM Lab, Department of CSE&IT, MITS Gwalior.**