One Week Workshop-cum-training program

On

Understanding Deep Learning

Date: 10th March, 2021 – 15th March, 2021

Objective: As we know that neural network and deep learning are the most powerful tools in the field of Artificial Intelligence (AI). The workshop is aimed at imparting knowledge and training on the machine learning, foundations, and advances in deep learning. The main objective of this workshop is to make the participants familiar with the Emerging applications of machine learning and deep learning. Participants will explore and learn about the machine learning basics, overview of Different neural network architectures, Deep learning essentials, Convolutional neural networks, Autoencoders, GANs, Recurrent neural networks, Recent trends, Applications and many more. Hands-on sessions will also be conducted for some real life problems, on Python platform.

The workshop will be conducted in online mode.

Registration form for link: <u>https://forms.gle/KC5Q9ucVQsnTxbvf9</u>

Course Contents:

- Machine Learning Basics
- Neural Network Architectures
- Convolutional Neural Network Design and Implementation
- Recurrent Neural Network Design Architectures
- Deep Reinforcement Learning
- Feature Extraction and Pre-processing.
- Machine Vision and Augmented Intelligence
- Deep Learning in Healthcare
- Deep Leaning Applications in Data Science etc.

Resource Persons

- Professors from IITs, IIITs, NITs
- Experts from Industries
- Faculty from MNNIT Allahabad

Important Date

Registration Deadline : 5th March 2021 Registration Fee (GST inclusive)

- U.G. Students 590/-P.G. Students 708/-PhD Students 944/-Faculties and Others 944/-Registration fee can be submitted in form of D.D. in favour of "WCTP" payable at Allahabad
- or

NEFT/Mobile Banking A/C Name: WCTP A/C I Bank Name: Bank of Baroda Bank IFSC Code of Branch: BARBOVJMNRE

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Course Coordinator's

Dr. Dushyant Kumar Singh & Prof. D. S. Kushwaha

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Course Convener

Dr. Vibhav Prakash Singh Dept. of CSE, MNNIT Allahabad



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Tentative Schedule

• There will be two sessions per day

Session Date	1st Session (11:15 AM – 12:45 PM)	2nd Session (04:30 PM – 06:00 PM)
10 March 2021	Inauguration	The AI World
11 March 2021	Machine Learning Basics	Hands-On 1
12 March 2021	Towards Deep Learning	Hands-On 2
13 March 2021	DNN for Computer Vision	Hands-On 3
14 March 2021	Overview of different DNN Architectures	Hands-On 4
15 March 2021	Recurrent Neural Network	Valedictory