NATIONAL POWER TRAINING INSTITUTE
HOT LINE TRAINING CENTRE
A National Apex Body for Training in Power Sector
Ministry of Power, Government of India
26TH K.M., Kanakapura Main Road, Kaggalipura Post,
Bangalore 560 116, Karnataka, India

3 Weeks Online Training Program on Artificial Intelligence (AI)

5.10.2020 to 23.10.2020

About NPTI: National Power Training Institute (NPTI) an ISO 9001 & ISO 14001 organization under Ministry of Power, Govt. of India, is a National Apex body for Training and HRD in Power Sector with its Corporate Office at Faridabad. NPTI is the world's leading integrated power training institute and it is operating on an all India basis through its regionally located Institutes at Faridabad, Badarpur, Nangal, Bengaluru, Neyveli, Durgapur, Guwahati, Nagpur, Alappuzha (Kerala) and Shivpuri (MP). NPTI has more than 50 years of professional expertise in the field of training and HRD in Power sector with industry specific interface.

Program Overview: Artificial Intelligence also known as Machine Intelligence refers to intelligence displayed by machines, which is contradictory to intelligence displayed by humans known as natural intelligence. AI research which is a component of computer science has been defined as the study of any electronic device which assesses its environment and takes actions that maximize its chances of achieving its designated goals. Generally, the term "Artificial Intelligence" is used when a machine intimates "cognitive" functions that humans relate to other human minds, for eg. "Learning" and "Problem-Solving".

The range of AI is often disputed as machines increasingly become capable because tasks which have been established to need "Intelligence" are often removed due to an effect which is known as "AI effect". For instance, optical character recognition is generally excluded in Artificial Intelligence as it has become an ordinary technology. There is a high career scope in Artificial Intelligence as it is an ever-changing technology. Nowadays, almost all industries are dependent on Artificial Intelligence, thus there is always a high demand for Software Analysis, Computer scientists, Research Scientists etc.

Registration Fees for Engineers and Students: Rs. 6,000/- Per Participant + Rs.1080/- (18% GST) = Rs. 7080/-

Mode of Training: On-Line through Google Meet

Registration Link: https://forms.gle/eCfZiaZZBi1nhUxY9

Who May attend: Engineers/Academicians/Research Scholars/Students

NEFT/IMPS/RTGS

National Power Training Institute, Hot Line Training Centre, Bangalore

(State Bank of India, Banashankari II Stage, Bangalore, A/C-10031210270, IFSC -SBIN0006767)

UPI QR Code:

Meeting ID, Password Will be sent to Registered Participants before the commencement of Program

After successful completion of training "E-CERTIFICATE" will be awarded to Participants

Course Coordinator:

Sh. S.Prakash, Asst Director

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For all correspondence

Sh.K.S.Venu Babu, Director

National Power Training Institute

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Training Schedule

Day/Date	Topics
Mon / 05.10.2020	Introduction to Artificial Intelligence, History, Applications, Statistic essentials, Statistic essentials, preprogram preparation
Tues / 06.10.2020	Introduction to python programming, Control flow, Functions, Data structures, Modules and packages
Wed / 07.10.2020	File input and output, Exception handling, Standard library
Thurs / 08.10.2020	Introduction to machine learning, Supervised algorithm for AI problem, Supervised algorithm for AI problem
Fri / 09.10.2020	Supervised algorithm for AI problem, Introduction to OPEN-CV, Library and packages to use for image and video processing
Sat / 10.10.2020	**Weekly Off**
Sun / 11.10.2020	
Mon / 12.10.2020	Concept of image segmentation in AI, Introduction to NLP(nltk), Text mining using NLP, Text mining processes tokenizer
Tues / 13.10.2020	Text mining processes (stemming, lemmatization, pos, syntax, chunking etc), Use of ML and NLP for solving problem, How Deep Learning Works?
Wed / 14.10.2020	How Neural Network works?, Understanding various components of Neural Networks., Keras, Theano, Tensor Flow – Installation, Introduction to Keras, Theano, Tensor Flow., Functionalities of Tensor flow, Single and multi-layer perceptron, Pros and cons of single and multi-layer perceptron
Thurs / 15.10.2020	Training using back propagation. Convolution Neural Network.
Fri / 16.10.2020	Convolution Neural Network, Use of OPEN-CV with deep learning.
Sat / 17.10.2020	**Weekly Off**
Sun / 18.10.2020	
Mon / 19.10.2020	Introduction to reinforcement learning, Q-Learning, case study Uber Autonomous car
Tues / 20.10.2020	Case study Uber Autonomous car, Google road map using BFS and DFS, case study.
Wed / 21.10.2020	Introduction to Robotics, Parts of a robot, Actuator design and components, Introduction to Raspberry-pi, Installation of Raspbian, Input and Output programming using python, Sensor Interfacing using python.
Thurs / 22.10.2020	Integrating AI features with Raspberry-PI. Integrating AI robot using IOT, Applications object segmentation, object recognition.
Fri / 23.10.2020	Applications sentimental analysis, chatbot, Real time objects detection using AI robot, counselling taking robot design.

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