Department of Science & Technology
Govt. of India

DST sponsored

National Workshop
on
Artificial Intelligence in Industry 4.0
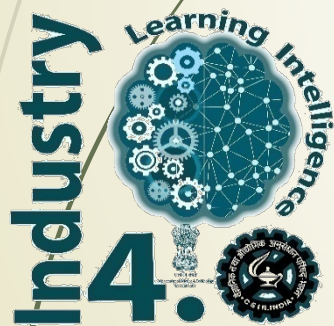
November 07- 09, 2019

Venue:
CSIR-CMERI, M.G. Avenue,
Durgapur– 713209, India

About Workshop

Artificial intelligence (AI) technology is now making its way into manufacturing, and machine learning (ML) technology and pattern recognition software at its core can hold the key to transform factories of near future. AI is well suited to manufacturing for automated process operation, quality control, shorten design time, and reduce materials waste, improve production reuse, perform predictive maintenance, and more. Today, thousands of people in a single factory work together to spot defects, an incredibly tiring task, but deep learning, a kind of ML, algorithm may take a fraction of second to inspect a part and they are also more accurate than manual intervention. In a recent move to bring AI into manufacturing, a team of researchers at Siemens Corporate Technology, Germany, developed a two-armed robot that can manufacture products without having to be programmed. By analyzing the data, the artificial intelligence systems can draw conclusions regarding a machine's condition and detect irregularities in order to make predictive maintenance possible. Now deep learning and AI has advanced to a point that it has a potential to transform every industry. For example, even though the Industry 4.0 revolution is still in its early stages, we are already witnessing significant benefits from AI. This workshop is aimed to bring industry and academia together under the same roof for sharing their insights to truly leverage AI for Industry 4.0.

Broad Topics

- Basics of Machine Learning, Deep Learning and Artificial Intelligence
- Smart Sensors and Actuators
- AI in Additive Manufacturing
- Cloud computing in Manufacturing
- Soft computing for Industry
- Machinery diagnostics and prognostics
- Machine Vision
- Machine to Machine Communication
- Human machine Interface
- Industry 4.0 – application perspective
- Industrial Case studies

About CSIR-CMERI

CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI) was founded in February 1958 and it is a premier R&D institute under the aegis of Council of Scientific & Industrial Research (CSIR), New Delhi. CSIR-CMERI has been engaged in various R&D activities and skill development programmes. One of the R&D focus of CSIR-CMERI is in the area of Intelligent and Additive Manufacturing.

For more details, please visit CSIR-CMERI website https://www.cmeri.res.in or follow us on

f /CSIRCMERIDgp   or   **🐦** /csir_cmeri

Faculty

Eminent experts in the areas of AI, ML and Industry 4.0 domains from premier Institutions and reputed organizations like ISI, IISc, IITs, Jadavpur University, NITs, CSIR, Industries will deliver lecture in the workshop. Industry experts will share their experience as case studies. It is expected that best minds from industry and academia will come together under the same umbrella for sharing their insights with participants.

Important Dates

Last date of receipt of completed application forms is 15th October, 2019. The selected candidates shall be intimated through E-mail about their selection with other necessary details by 25th October, 2019.

Who can apply?

Students, Scientists and Faculties can apply within 15st October, 2019 duly forwarded by head of Institution or its nominee. DST pays for registration fee, kit, refreshment, and working lunch for max. 50 participants. The participants of SC/ST category shall be given preference. The list of selected participants will be published on the website and also communicated vide Email.

Organizers

Chair	Prof. (Dr.) Harish Hirani
Convener	Dr. Naresh Ch Murmu
Co-Convener	Dr. Aditya Kumar Lohar
Coordinators	Dr. Rajesh P Barnwal
	Dr. Samik Dutta
	Mr. Phani K Mallisetty
Treasurer	Dr. Pranab Samanta

How to Apply?

Duly-filled application may be sent to *nwaii@cmeri.res.in* in the prescribed format. The sponsorship recommendation from authorized officials of their respective Institution shall only be entertained for consideration. Queries may be sent directly through given mail.

Nearby budget hotels and lodges:

Hotels	Phone Numbers
Hotel Park Prime	033 4025 1111
Luxor Hotel	0343 254 6047
Hotel SUVAM	0343 254 7540
Hotel Banerjee Inn	0343 254 9944
The Citi Residenci	0343 254 9053
Peerless Sarovar Portico	0343 254 6601
Hotel Shankar	0343 254 9901