

Expert Talk On “ AI (Artificial Intelligence) Relevance and Application in Process Industries

Brief: With the technological advancement, particularly in 4.0 scenario, the processes are required to be more accurate and efficient. The genesis of AI (Artificial Intelligence) is trying to support the fast growth of this new technology. AI is not only related to computer science, but also very important tool for progress of Process Industries.

PD India planned a expert talk to make discussions and Q&A session for the AI relevance and application.

The event was planned at VMCC, IIT Bombay, Powai, Mumbai on 28th September, 2019. at 4:00 pm.



Mr. Sunil C Panchbhai, Secretary PD welcomes the guests and shared the agenda of the event. He introduced the speakers impressive resume to the audience.

Dr. Milind Atrey , Chair, PD briefed the details of the IMechE Process Division Activities till now, idea behind holding this subject and expected take away from the days event to entrepreneurs, students and professional attending the event.

The speakers were Prof. Dr. Asim Tewari ,IIT-Bombay , an authority on AI , with over 100 papers and 10 international patent on AI and working for global AI organizations for guiding in various arena. He has also set up many technology centres and nurturing start ups.

Another speaker was Mr Naveen Srinivas, a Founder/CEO of start-up Cogxar Bengaluru, who is into applications providing for AI in various industries.

Presence of past Aerospace Chair and now trustee board member Mr. Vijay Raman was notable, and he welcomed the speakers on IMechE PD behalf.



Prod Dr. Asim Tewari introduced the subject from basic concepts. He shared the evolution and cited stage wise examples to understand the AI gradual changes.



He share the concepts as Classical machine learning, Deep learning and Reinforcement learning of the machines. He explained in a very simple way, the types as Narrow Intelligence, General Intelligence, Super Intelligence along with detailed examples , which were quite conversant for the attendees. Some interesting applications as LIP reading and newly being developed as Dream reading made audience more interested.

Dr. Tewari share the field applications as Informative analytics, Predictive analytics and Prescriptive analytics. He made all understand the concept as well as simplified examples of the same in Industries.

He also shared how OEE (Overall Equipment Effectiveness) can be simplified with AI. He shared concept of self learning of the machines and its current state at global level.

Second Speaker Mr Naveen holds the industry experience and also worked in PLM organizations as SIEMENS and other.

He cited the AI definition and share the development of the AI in line with biology examples. Like finding the best path from analogy of Ant movement, Pray and predator concept. He shared the relation with image THINKING by AI.



He shared the applications in the Process Industries as in Electronics appliances becoming smarter, and more communicative.

The healthcare industries applications' as diagnosis and the ease of finding, that will be soon a major breakthrough in the related area were shared.

In manufacturing industries, AI relation was suggested for operational Quality improvements with ON line defects finding and recording was explained. The applications of FRS (Face Recognition System) and its various examples were cited.

Mr. Naveen also share example through video, of how AI can help in designing a layout and arrange machines and define processes sequence.

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Mr. Kaustubh Deshpande from organization LINE, Japan with over 15 years experience and working on Chatbots and AI. He shared the easing of difficulties with the help of AI in crowd sourcing and also the translation accuracy. He shared examples how the Japan faces issues with language issues and trying to overcome.

The attendees were over 50 and were comprised of professionals from industries, entrepreneurs , IIT students and IMechE members. All the attendees were very much interested in the topic and there was a great exchange over the AI applications. Issue of privacy of users, extent of AI in driverless car were few of the questions those were found interesting.



A memento was presented to speaker by Dr Atrey in appreciation of the contribution in AI field that enlightened the audience with it.



The even concluded with high tea and networking with the attendees.

