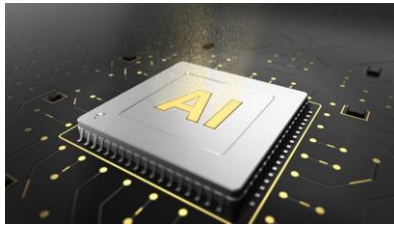


QIP Program on EMBEDDED ARTIFICIAL INTELLIGENCE

March 21-26, 2022



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ORGANISED BY



Electronics & Communication
Engineering Department

**National Institute of Technical
Teachers Training and Research**
Sector 26, Chandigarh - 160019

Website: www.nitttrchd.ac.in

BACKGROUND

Embedded Artificial Intelligence (EAI) is a new technique of implementing distributed Artificial Intelligence using embedded technologies. These systems have the capacity of reasoning about their external

environments and adapt their behavior accordingly. A smart combination of embedded and intelligent computation, EAI integrate neural networks, expert systems and other sophisticated artificial intelligence (AI) models with specific hardware to facilitate machine learning, deep learning, self-organizing and self-optimizing.

Designing an intelligent resource-constrained software is not a trivial task especially in a real-time context. Despite significant development of such systems, few challenging issues in design still persist. To address these problems, efforts are being made to take advantage of progress in semiconductor technology to render the integration of AI with the embedded world a reality. This new paradigm is envisaged to create demand for many more sensors, actuators and embedded networks possessing Artificial Intelligence.

The main objective of this course is to enrich the participants with Virtual reality, Augmented reality, Artificial Intelligence (AI), Embedded Systems Based Expert Systems, Digital Twins, collaborative robots and other developments in this area.

TENTATIVE CONTENTS

- AI Inspired Embedded Hardware Designs
- Search Techniques
- Machine Learning
- Deep Learning
- Intelligent Embedded IoTs
- Intelligent Embedded Software
- Cloud Computing and Artificial Intelligence
- Natural Language generation and Translation
- Virtual Agents

- Robots for Astronomy
- Robotic Process Automation
- Biometrics
- Design, Make, Use and Treat Intelligent Systems

EMINENT SPEAKERS

Prof. Aditya Nigam, IIT Mandi
Prof. SP Tiwari, IIT Jodhpur
Prof. Deepak Joshi, IIT Delhi
Prof. Brajesh K. Kaushik, IIT Roorkee
Prof. G.N.Pillai, IIT Roorkee
Prof. Jyotindra S. Sahambi, IIT Ropar
Prof. Rohit Y Sharma, IIT Ropar
Prof. Ajay Singh, IIT Jammu
Prof. Narayanan C. Krishnan, IIT Ropar
Prof. HM Gupta, IIT Delhi
Prof. Brijesh Khumbani, IIT Ropar
Sh. U. N. Maurya, MD, LM Healthcare, Chandigarh
Er. Gaurav Kumar, Director, Magma Research Services, Haryana
Er. Devender, Touch Techno, Delhi
Dr. Sanjay Sood, C-DAC Mohali

ABOUT NITTTR CHANDIGARH

Since its inception in 1967, NITTTR (formerly TTTI) Chandigarh has made rapid strides in the areas of Engineering and Technology and other emerging areas like Educational Television, Entrepreneurship Development, Rural Development, Industry-Institute Interaction and Educational Management. The Institute offers six postgraduate programmes in Engineering and Engineering Education through regular and modular modes. In addition to education and training programmes, the institute renders extension services to polytechnics, undertakes research and development projects and develops print and non-print instructional material.

ABOUT CHANDIGARH

Located at 270 km north-west of New Delhi, City Beautiful Chandigarh, well-planned and one of the fastest growing metropolitan cities of modern India is hub of many R&D, academic and industrial institutions including Semi-Conductor Complex Ltd (SCL), Terminal Ballistic Research Lab (TBRL), Central Scientific Instruments Organisation (CSIO), Snow & Avalanche Studies Establishment (SASE), Bharat Electronics Ltd. (BEL), Post Graduate Institute of Medical Educations and Research (PGIMER), National Institute of Pharmaceutical Education & Research (NIPER), Engineering and Medical Colleges, Software Technology park etc. The city also offers pleasing sight in Rock Garden, Rose Garden, Sukhana Lake, Topiary Park, Terrace Garden, Capitol Complex, Museum and Art Gallery etc.

IMPORTANT INFORMATION

Last date of Registration: 10th March, 2022

Certification: E-Certificates shall be issued to all participants having more than 80% attendance is compulsory.

Registration Fee: No registration fee.

Registration Link:

<https://forms.gle/kr8HJKtnyjwwP9cU6>

COORDINATORS

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