

## Course Overview

Semantic Intelligence (SI) is an area that was first exposed to in the early nineties. There're primarily two categories of AI: the Symbolic school dominated early research in the field, while the sub-symbolic (Connectionist) AI gained steam from the nineties. Symbolic AI and sub-symbolic AI have to go together to achieve semantic intelligence. The Hybrid Model combines machine intelligence with human intelligence to reach conclusions faster than possible by humans alone along with the explanations needed for understandability and trust in the decisions and results; while requiring far fewer data samples for training and conversing in natural language. The Hybrid Model is able to generalize and is excellent at perceiving, learning, and reasoning with minimal supervision. In the last two decades, there has been a distinct shift towards use of 'semantic' intelligence in problem solving, a step towards realization of explainable AI and Artificial General Intelligence. A lot of work is happening in this area with both Academia and Industry working in tandem.

**Registration Fee: NIL**

## Unique Points

- As semantic intelligence and its applications is entering the newest curricula at education institutions worldwide, and not many workshops and FDPs pertaining to same are available; it is high time to introduce such a workshop which can serve as reference for concerned.
- Our group has already conducted three workshops in this area. [Here](#) is the last years FDP. [Here](#) is the Part I of this year's FDP. It is better, if the participants go through these workshops before registering for this one.
- This workshop will provide pointers to the latest research questions in this area.
- The workshop will be delivered by distinguished and learned experts fro industry and academia.

**Registration:** Please fill both the forms

<https://atalacademy.aicte-india.org/signup>

<https://forms.gle/zGXYALjHsXqL8Toh7>



## Advanced Semantic Intelligence: The Way Forward with Artificial Intelligence (Part II) Advanced

**21-25 July 2021**

Sponsored by AICTE Training and Learning(ATAL) Academy

**Convener:**

**HOD, DCA**

**Coordinator**

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**Department of Computer Applications,**

**National Institute of Technology Kurukshetra**  
(Institute of National Importance)



# One Week Online FDP on Semantic Intelligence: The Way Forward with Artificial Intelligence (Part II)

July 21-25, 2021

Organized by  
Department of Computer Applications  
**National Institute of Technology Kurukshetra**  
(Institution of National Importance)

Sponsored by  
All India Council for Technical Education, Government of India  
Under  
AICTE Training & Learning (ATAL) Academy

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Director  
NIT Kurukshetra

## Convener

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Kumar Singh  
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IIIT Delhi

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IBM  
Research

Monika Jain  
IIIT Delhi

**Who can register?** The faculty members of the AICTE approved institutions, research scholars, PG Scholars, participants from Government, Industry, and staff of host institutions. Not more than 30% from Host Institution.

**Registration:** Please fill both the forms

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**Registration Fee: NIL**

# Semantic Intelligence:

## The Way Forward with Artificial Intelligence (Part II)

### July 21-25, 2021 (Session Plan)



	9:30 am - 11:30 am	11:45 am - 1:45 pm	2:45 pm - 4:45 pm
<b>Day 1</b> 1 <sup>st</sup> July 2021	An Overview of Trustworthy AI  <b>C. Anantaram</b>	Knowledge Graphs .....  <b>Sumit Bhatia</b>	Searching for Knowledge in a Knowledge Base  <b>Anuj Saxena</b>
<b>Day 2</b> 2 <sup>nd</sup> July 2021	Explainable Agents  <b>Hiranmay Ghosh</b>	Application of Ontologies to Materials Domain  <b>Gandham Phanikumar</b>	Discover the ontologies and vocabularies using MOD ontology  <b>Biswanath Dutta</b>
<b>Day 3</b> 3 <sup>rd</sup> July 2021	Semantic Explainability: The Role of Semantics in Explainable AI  <b>V. Raghava Mutharaju</b>	Knowledge Extraction and Enrichment  <b>Nidhi Goyal, Monika Jain</b>	Ontology learning and Benchmarking  <b>Monika Jain, Gunjan Singh</b>
<b>Day 4</b> 4 <sup>th</sup> July 2021	Ensuring Fairness in Explainable Systems  <b>Abhijnan Chakraborty</b>	KGs in Explainable AI - Defining the Scope  <b>Arindam Chatterjee</b>	A Natural Way to Release Stress with Generosity of Heart  <b>Sushma Viladkar</b>
<b>Day 5</b> 5 <sup>th</sup> July 2021	  <b>Tanmoy Chakraborty</b>	Knowledge Base Question Answering  <b>Saswati Dana</b>	  <b>Valedictory Test and Feedback</b>