

Online Faculty Development Programme

on

IoT Induced Artificial Intelligence for Emerging Computing Paradigms

4th to 8th Oct 2022

Organized by:



Department of Information Technology

Dr B R Ambedkar National Institute of Technology Jalandhar

Grand Trunk Road, Amritsar Bypass,
Jalandhar, Punjab 144011

Platform: Microsoft Team

ABOUT NIT JALANDHAR

Dr B R Ambedkar National Institute of Technology was established in the year 1987 as Regional Engineering College and was given the status of National Institute of

Technology (Deemed University) by the Government of India on October 17, 2002 under the aegis of Ministry of Human Resource Development, New Delhi. Now the Ministry of Human Resource Development, Government of India has declared the Institute as “Institute of National Importance” under the act of Parliament-2007. A large number of reputed Industrial houses in the country visit the Institution and select the final year students as Engineers/ Management Trainees. As one of the National Institutes of Technology (NIT), the Institute has the responsibility of providing high quality education in Engineering, Technology and Sciences to produce competent technical and scientific manpower for the country. The Institute offers BTech, MTech, MSc, MBA and PhD programmes in the several disciplines of Engineering, Technology and Sciences.

For more info: <http://www.nitj.ac.in>

ABOUT IT DEPARTMENT

Striding ahead with the vision and mission of the Institute and continuing forward the objectives, each department frames its own vision and mission. Our department looks forward its *Vision* as follows:

- To be the frontier of Computer Science and Engineering and to produce globally competent graduates with high moral values committed to build a vibrant nation.
- To be recognised nationally and internationally for delivering outstanding computer science education and conducting research of high distinction, both of value and relevance to the communities we serve.

While we are striving hard to achieve the vision, the *Mission* of the department which is assisting in the process tends to have:

- A strong theoretical excellence and competence in the fundamental areas of Information Technology to nurture students for utilizing high

creativity, innovation and out-of-the-box thinking.

- A breadth of knowledge in a variety of application areas pertaining to the field of Computer Science so that students can maximize their career options.
- Preparation for contemporary research and development in Computer Science application areas for industry or academia.
- The awareness of professional, social and ethical responsibilities through curricular, co-curricular and extracurricular activities.

ABOUT THE FDP/WORKSHOP

An intensive One-week faculty development programme is being organized for faculty, research scholars of engineering and technological institutions. It is also open to persons hailing from the industry. The objective of this workshop cum FDP is to present a clear understanding of today's technologies based on Next Generation Smart Computing Paradigm. Dynamic interactive sessions with prominent experts will be conducted in different domains of research such as Cloud Computing and its Services, Fog/Edge Computing and its Applications, Internet-of-Things, Big Data & Analytics, Artificial Intelligence and many more. The technical program will include state-of-the-art seminars, discussion/presentation sessions, signifying the Research challenges, insights and practical learning through Hands-on sessions on aforementioned research areas.

The participants from academics/industry will be benefited immensely and this course will be a guiding light to learn and carry out research activities. This workshop aims to impart knowledge to the participants pertaining to theoretical as well as analytical treatment to existing problems.

The FDP course will equip the participants to develop a smart system incorporating the thrust areas and will make them well versed with various application areas that may ease day to day and real-life activities. The participant will adopt new trends of accessing and retrieving data along with analyzing it from a remote location. The objective of this workshop is to hone the skills of researchers and practitioners from academia and industry to gain insights with the existing research developments and challenges, along with practical exposure to effective smart systems, tools, and related applications.

FACULTY DEVELOPMENT PROGRAMME/ WORKSHOP CONTENT

Expert lectures and extensive hands-on sessions cover following topics:

- *Artificial Intelligence*
- *Cloud Computing and its Services*
- *Fog/Edge Computing and its Applications*
- *IoT Architecture and Protocols*
- *Machine Learning APIs in Cloud*
- *Smart e-Healthcare*
- *Smart Agriculture*
- *Big Data & Analytics*
- *AI enabled emerging technologies*
- *Machine & Deep Learning*
- *Case Studies on Cloud and IoT Applications*

PATRON

Prof. (Dr.) Binod Kumar Kanaujia
Director, NIT Jalandhar

CONVENERS

Mr. D K Gupta,
Dr. Samayveer Singh

CO-ORDINATORS

Dr. Mohit Kumar
Dr. Nisha Chaurasia
Dr. Kunwar Pal

ORGANISING COMMITTEE

Prof. (Dr.) A. L. Sangal
Dr. Harsh K. Verma
Dr. Geeta Sikka
Dr. Renu Dhir
Dr. Rajneesh Rani
Dr. Avtar Singh
Dr. Kuldeep Kumar
Dr. K. P. Sharma
Dr. Aruna Malik
Dr. Amritpal Singh
Dr. Urvashi
Dr. Jagdeep Kaur
Dr. Prashant Kumar
Dr. Lalatendu Behera
Dr. Neeraj Kumar
Dr. Vanitha
Dr. Shailendra Tripathi
Mrs Nisha
Mrs Ashdeep

RESOURCE PERSONS

Eminent academicians affiliated to IITs, IIITs, NITs, other renowned institutes and Industry experts will deliver the sessions with practical demonstrations.

HOW TO APPLY

Registration can be done using Google form link below:
https://www.nitj.ac.in/events_registration/fdp_aiecp/login

Expected Audience: Industry Personnel, Faculty, Research Scholars.

Registration fees:

Faculty, Research Scholars, PG students,	Rs. 300+18%GST
Industry Participants	Rs. 500+18%GST
NITJ Faculty/Research Scholars and students	Rs. 200/-

Last date of Registration: 30th Sept 2022
Certificate of participation will be provided online.

For any query, contact:

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Dr B R Ambedkar National Institute of Technology Jalandhar Punjab India Department of Information Technology

One Week Online Faculty Development Programme

"IoT-Induced Artificial Intelligence for Emerging Computing Paradigms"

4th Oct, 2022 to 8th Oct, 2022

ORGANIZING COMMITTEE

CHIEF PATRON

Professor B K Kanaujia
Director, NIT Jalandhar

PATRON

Prof. Ajay Bansal
Registrar, NIT
Jalandhar

CONVENER

Er. D.K. Gupta
Head, IT Dept, NIT Jalandhar

Dr Samayveer Singh
Dept of CSE, NIT Jalandhar

COORDINATORS

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Dept. of IT, NIT Jalandhar

Dr Nisha Chaurasia
Dept. of IT, NIT Jalandhar

Dr Kunwar Pal
Dept. of CSE, NIT Jalandhar

ORGANIZING TEAM MEMBERS

Prof. A.L. Sangal
Dr. Harsh K. Verma
Dr. Geeta Sikka
Dr. Renu Dhir
Dr. Rajneesh Rani
Dr. Avtar Singh
Dr. Kuldeep Kumar
Dr. K.P. Sharma
Dr. Aruna Malik
Dr. Amritpal Singh
Dr. Urvashi
Dr. Jagdeep Kaur
Dr. Prashant Kumar
Dr. Lalatendu Behera

OBJECTIVE OF THE COURSE

An intensive program is being organized for all engineering and technological institute faculty. It is open to people from industry and is focused on the thrust area of computer science specially Artificial Intelligence Cloud Computing and Internet of Things. It is also open to faculty members, persons from industry and doctoral/M.Tech students.

TOPICS TO BE COVERED

Expert lectures and extensive hands-on sessions cover following topics:

- Artificial Intelligence
- Cloud Computing and its Services
- Fog/Edge Computing and its Applications
- IoT Architecture and Protocols
- Machine Learning APIs in Cloud
- Smart e-Healthcare
- Next Generation IoT networks
- Smart Agriculture
- Big Data & Analytics
- Machine & Deep Learning
- Case Studies on Cloud and IoT

TENTATIVE TIMINGS

Session1: 11:00 AM to 1.00 PM

Session2: 03:00 PM to 5:00 PM

REGISTRATION FEES

Faculty, Research Scholars, PG students	Rs. 300+18%GST
Industry Participants	Rs. 500+18%GST
NITJ Faculty/Research Scholars and students	Rs. 200/-

Registration Link for FDP

https://www.nitj.ac.in/events_registration/fdp_aiecp/login

For any queries, please contact:

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Name & designation of Experts

Prof. D. P.
Vidhyarthi

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Prof. Virendra
Singh

IIT Bombay



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JNU New Delhi



Prof. O P Verma
DTU, New Delhi



Prof. Aditya
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Associate
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Dr. Sumit Kalra
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IIT Jodhpur



Dr. Ashish
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