International Conference on Artificial Intelligence: Theory and Applications (AITA 2021)

Date: 23rd – 24th December 2021

National Institute of Technology Patna,Bihar,India

About the Conference: International Conference on Artificial Intelligence: Theory and Applications (AITA-2021) will be a leading conference for bringing students, researchers, faculty members and industry experts under one umbrella for betterment of society through innovation in interdisciplinary area . It provides interactive platform for presenting new advances and innovative research results in the fields of Artificial Intelligence and its applications. Various tracks will cover both application and current research trends in the field of artificial intelligence.

About NIT Patna: National Institute of Technology Patna is the 18th National Institute of Technology created by the Ministry of H.R.D. Government of India after rechristening the erstwhile Bihar College of Engineering Patna on 28. 01. 2004. NIT Patna marked its humble beginning in 1886 with the establishment of pleaders survey training school which was subsequently promoted to Bihar College of Engineering Patna in 1924. This made this institute the 6th Oldest Engineering Institute of India. The institute is situated on the south bank of holy river Ganges behind Gandhi Ghat, one of the most important and reverential place of Patna. The Gandhi Ghat is associated with the immersion of ashes of father of the Nation Mahatma Gandhi in the river Ganges. The campus has a picturesque river view with historic building presenting a spectacle of architectural delight and natural beauty.

Call for Papers

The conference program will also include high level talks from invited speakers. Supplemented by contributed talks highlighting new research and perspective in AI domain. The conference chairpersons, along with the entire team cordially invite you to submit your latest original and unpublished research work/results in the field of Artificial intelligence and Applications. The upcoming conference to be held on December 23-24, 2021 at National Institute of Technology Patna, Bihar (India).

AITA 2021 will be contemplating the two Modalities of participation: Face to face and Virtual.

All Accepted and presented papers will be published in SCOPUS Indexed book series Lecture Notes (Springer).

Selected papers from AITA-2021 would be considered for publication in Special Issue of Journal (SCI, SCIE and Scopus indexed.

Important Dates

Paper Submission Dead Line	15 May, 2021
Acceptance	05 September, 2021
Final Submission	25 September, 2021
Registration	26 September, 2021

Registration Fees:

Category	Indian Participants (INR)	Foreign Participants (USD)
Students (UG/PG/Research Scholar)	6000/-	$150
Academicians	8000/-	$250
Industry Persons	10, 000/-	$300
Extra Paper	5000/-	$100
Extra Pages (Per Page)	1000/-	$25
Only Attending	2000/-	$50

General Queries:

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Account Details for Registration:

NITP CF A/c : 50433562364
IFSC Code: IDIB000B810

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•Dr. Manish Khare, Assistant Professor, Dhirubhai Ambani Institute of Information and Communication Technology, Gandhi Nagar, Gujrat

•Dr. Ajay Kumar Maurya, Assistant Professor, VBSPU, Jaunpur, U.P

Original and unpublished research papers are invited in the field of following current tracks and sub-tracks, but not limited to:

1. Artificial Intelligence and Embedded Systems

Artificial Intelligence
Machine Learning /Deep Learning
Humanitarian Technology
Neural Networks
Fuzzy Logic
Expert Systems
Agents and Multi-agent Systems
Natural Language Processing
Data Mining
Computational Optimization
Robotics, Control and Automation
Sentiment Analysis
Quantum Computing
High Performance Computing
Distributed and parallel systems
Cognitive Computing
Grid Computing
Optimization
Embedded Computing
Scalable Computing
Human-centered Computing
Mobile computing
Computer Architecture and Systems
Language Technologies and Information Retrieval
Computational Intelligence System

2. Computer Vision and Applications

Machine Vision
Soft-computing
Human Computer Interaction
Pattern Recognition
Computer Vision
Image Processing
Action Recognition
Geographic Information Systems (GIS)
Video Analysis
Medical Diagnosis
Segmentation Techniques
Augmented Reality
Virtual Reality
Bioinformatics and Machine Learning
Datasets and Evaluation
Medical, Biological and Cell Microscopy

3. Application of AI in Advanced Communication Networks

Machine Learning and AI in Networking
Network and System Security
Network Management and Traffic Engineering
Opportunistic Networks
P2P Networks
Pervasive Sensing and Socio-Technical Networks
Cyber Physical Systems
5G Communication
Physical Layer Communication
Heterogeneous networks (Het-Nets)
Cognitive radio and white-space networking
Cloud computing
Information/Content centric networks (ICN)
Wireless Ad-hoc and sensor networks
Systems and networks for smarter energy and sustainability
Vehicular communications
Smart Grid communications and networking
Cognition and Cognitive Computing in Networking
Online social networks
Overlay communications, content distribution
Microwave communication devices
Millimeter wave communication devices
Photonic antennas
Satellite communications
Wireless communications
Underwater communications
Cross layer design

4. Application of AI in Microwave and Optical Fiber Communication

High Power RF
Microwave Devices,
Circuits and Systems.
RF MEMs,
Metamaterial devices
Microwave Imaging and Remote Sensing
Antenna design
Microwave communication devices
Millimeter wave communication devices
Filters
Dielectric resonator antennas
THz devices
Microwave Absorber
Microwave Integrated Circuits
Computational Electromagnetics
Photonics
Waveguides and Devices
Optical Fiber and optical networks
Free Space Optical Communication
Hybrid RF/FSO System

5. IoT Based Applications

Internet of Things
Block chain
Big Data Analytics in Networking, including IoT Analytics
Deep learning
Datamining
Data Analytics
Mobile Applications
Digital Transformation
Social Computing
Smart Cities
Smart Grids and Energy Networks
Sensing and Sensor Networks
Ambient Assisted Living
Smart Healthcare
Intelligent Transportation
Data Science
Affective computing
Agents and Multi-agent Systems
Context-aware pervasive systems

6. AI in VLSI Applications

VLSI Design,
Fabrication and characterization
Nanostructure and Nano electronics
Analog and Mixed Signal IC Design
Design of Signal Processing Circuits using Analog Building Blocks
FPGA based System Design
Beyond CMOS Devices
Green Electronics
Steep switching transistors
Low Power High Performance Robust Circuit Design
System on Chip (SOC) and Semiconductor Technology

7. Signal Processing and Applications

Biomedical Signal Processing
Speech Analysis
Speech Enhancement
Speech Recognition
Keyword Spotting
Speaker and Language Recognition
Efficient Hardware Architectures for Speech Processing Algorithms
RADAR Signal Processing
Adaptive filters.
Geophysical Signal Processing