



# One Week National Workshop On Modern Deep Learning Architectures in Computer Vision: Concepts, Design, and Research Trends

16-20 March 2026

Organized by

Department of Information Technology, NIT Raipur

## CHIEF PATRON

Prof. N V Ramana Rao, Director, NIT Raipur

## PATRON

Dr. Guru Prasad Subas Chandra Mishra, Dean(R&C), NIT Raipur

## CONVENER

Dr. Sudhakar Pandey, HOD, Dept of IT, NIT Raipur

## COORDINATORS

Dr. Suvendu Rup, Associate Professor, Dept of IT, NIT Raipur

Dr. Deepika Agrawal, Assistant Professor, Dept of IT, NIT Raipur

## ABOUT WORKSHOP

Modern Deep Learning Architectures in Computer Vision: Concepts, Design, and Research Trends is a focused academic workshop that bridges foundational theory with current research practice in computer vision. The workshop examines how modern deep learning architectures are designed, why they work, and where the field is heading.

Rather than treating models as black boxes, the sessions unpack architectural choices, training strategies, and evaluation practices that drive real-world performance in vision tasks. Emphasis is placed on understanding research trends, reading recent literature critically, and translating ideas into implementable solutions.

## OBJECTIVES OF WORKSHOP

- To build a strong conceptual understanding of modern deep learning architectures used in computer vision
- To explain the design principles behind CNN variants, attention mechanisms, and transformer-based vision models
- To analyze why certain architectures outperform others on specific vision tasks
- To interpret recent research papers and identify meaningful contributions versus incremental changes
- To connect theoretical ideas with practical implementation and experimentation
- To expose participants to open research problems and emerging directions in vision-based deep learning

## TOPICS TO BE DISCUSSED

The workshop covers the evolution and current state of deep learning in computer vision, including:

- Foundations and Evolution
- Convolutional Architectures
- Attention and Transformer-Based Models
- Advanced Architectural Concepts
- Research Trends and Open Challenges

## TARGET PARTICIPANTS

Faculty members, research scholars and M.Tech / M.S in Computer Science, AI, Data Science, and related disciplines, Industry professionals involved in vision-based AI systems

**offline**

## ABOUT NIT RAIPUR

National Institute of Technology Raipur (Formerly Government Engineering College Raipur), situated in the capital of a newly incepted state of Chhattisgarh, has proven to be 'avant-garde' in the field of science and technology over past few decades in this region. With sweet memory of foundation ceremony by our President Hon'ble Dr. Rajendra Prasad on 14th September 1956, the institute started with two departments namely Metallurgical and Mining Engineering. Later the inauguration of the Institute building was done by our Prime Minister Hon'ble Pt. Jawahar Lal Nehru on 14th March 1963. The status of Government Engineering College, Raipur had been elevated to National Institute of Technology by the Central Govt. with effect from 1st Dec. 2005. This Institute had been working since last 50 years with a mission to support growth and promotion of industries and community of the region. The Institute has long recognized its role in engineering education, generation, and dissemination of useful and relevant technologies in the service of the society. NIT Raipur secured 65th rank this year (2023) by the NIRF ranking system.



## WORKSHOP REGISTRATION FEE

| Participant Category   | Fee                       |
|------------------------|---------------------------|
| Students-B.Tech/M.Tech | 500+18 % GST: Rs 590/-    |
| Faculty/Scholars       | 1000+18 % GST: Rs 1180/-  |
| Industry               | 2000+18 % GST: Rs 2360 /- |

## REGISTRATION PAYMENT ACCOUNT DETAILS

ACCOUNT NO. : 38027633250  
BANK NAME : STATE BANK OF INDIA  
BANK BRANCH : NIT BRANCH  
IFSC CODE : SBIN0002852  
MICR CODE : 492002004  
SWIFT CODE : SBININBB646  
PAN CARD NUMBER : AAAJN0643G  
GSTIN NUMBER : 22AAAJN0643G1ZN

## WORKSHOP REGISTRATION FORM

Once the payment is completed, candidates can register for the workshop using the Google link or QR code given below.

<https://tinyurl.com/ModernDeepLearning>



**Contact Us**



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**OFFLINE**