Five Days Online Workshop

On

"Generative AI Mastery: From Foundations to Applications"

18th to 22nd November 2024

Organized By



Department of Computer Science and Engineering,

Indian Institute of Information Technology, Nagpur- 441108, Maharashtra, India

https://www.iiitn.ac.in/

IMPORTANT DATES

Beginning of Registration: 01/09/2024 **Last Date of Registration**: 14/11/2024 **Notification of Acceptance by E-mail**: 15/11/2024

Registration will be done strictly on First Come First Serve (FCFS) as limited seats are available.



PATRONS

Hon. Dr. O. G. Kakde Director, IIIT Nagpur

Shri K. N. Dakhale Registrar, IIIT Nagpur

CONVENORS

Dr. Tausif DiwanAssociate Dean, IIIT Nagpur

Dr. Nishat Ansari HOD, CSE, IIIT Nagpur

WORKSHOP COORDINATORS

Dr. Jagdish ChakoleAssistant Professor, CSE, IIIT Nagpur

Dr. Anil Kumar Kushwah Assistant Professor, CSE, IIIT Nagpur

Dr. Snehal ShindeAssistant Professor, CSE, IIIT Nagpur

ORGANIZING COMMITTEE

Dr. Nileshchandra Pikle
Asst. Prof, CSE, IIIT Nagpur
Dr. Amol Bhopale
Asst. Prof, CSE, IIIT Nagpur
Dr. Khushboo Jain
Asst. Prof, CSE, IIIT Nagpur

REGISTRATION DETAILS

Registration fees: ₹1000/- only (₹500/- for IIITN students) including GST

Step1: Complete the payment transaction and retain the payment receipt (Payment method information is provided in step 2)

Step2: Register at: https://tinyurl.com/iiitn24

(Please use the above Google form link for registration, and ensure you upload the payment receipt.)

CONTACT DETAILS

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ABOUT THE INSTITUTE

Indian Institute of Information Technology, Nagpur (IIITN) is established under the Public-Private Partnership Scheme by the Ministry of Education (erstwhile Ministry of Human Resource Development), Government of India, and is supported by the Department of Higher Education, Government of Maharashtra, and Tata Consultancy Services, Mumbai as Industry Partner. IIIT Nagpur is recognized as an Institution of National Importance by an Act of Parliament in 2017. IIIT Nagpur started functioning during the year 2016-17, and shifted to its permanent campus sprawling 100 Acres of land near Butibori, Nagpur.

ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering at IIIT Nagpur offers B.Tech. programme in Computer Science and Engineering, Artificial Intelligence & Machine Learning, Data Science and Analytics and Human Computer Interaction & Gaming Technology. The department provides opportunities for full-time and part-time Ph.D. programs encompassing research in core and emerging fields. The department is equipped with all the state-of-the-art laboratories with the latest technologies and platforms along with best-in-class computing facilities. The department is dedicated to innovation and research in interdisciplinary areas. The department continuously puts valuable efforts into providing the latest state-of-the-art curriculum which can be applied to solve real-time problems in industries and society.

ABOUT WORKSHOP

Unlock the creative potential of AI in this immersive 5-day workshop on Generative AI. Dive deep into the cutting-edge world of neural networks and machine learning, where you'll explore how AI can generate text, images, and more. From mastering foundational concepts to building your own generative models, this workshop equips participants with the skills to harness the power of AI for innovation and creativity. Whether you're a student eager to learn or a faculty member looking to expand your expertise, join us to explore the transformative possibilities of Generative AI and shape the future of technology.

KEY WORKSHOP HIGHLIGHTS:

Master Generative Models: Explore the fundamentals of GANs, VAEs, and Transformers, and understand their role in AI-driven creativity.

Hands-On Model Development: Gain practical experience by building and training generative AI models from scratch.

AI-Powered Creativity: Learn how to generate text, images, and other creative outputs using state-of-the-art generative techniques.

Ethical AI Practices: Understand the ethical challenges in Generative AI, focusing on bias, responsibility, and the impact of AI-generated content.

Explore Emerging Trends: Stay updated on the latest advancements and future directions in Generative AI technology.

Capstone Projects: Apply your skills to real-world challenges through collaborative projects, and present your innovative solutions.

COURSE CONTENTS

- 1. Introduction to Generative AI
- 2. Foundations of Neural Networks
- 3. Understanding GANs (Generative Adversarial Networks)
- 4. Exploring VAEs (Variational Autoencoders)
- 5. Introduction to Transformer Models
- 6. Text Generation with AI
- 7. Image Generation Techniques
- 8. Ethical Considerations in Generative AI
- 9. Emerging Trends in Generative AI
- 10. Capstone Projects and Presentations

RESOURCE PERSON

Faculties from IIITN/VNIT will deliver their expert lectures and hands-on training.

WHO SHOULD ATTEND?

- Faculty and Students interested in exploring the latest advancements in AI and machine learning.
- Researchers and Enthusiasts looking to dive into the world of generative models and AI-driven creativity.
- ➤ **Professionals** aiming to integrate AI into creative or technical projects.
- **Beginners** with a passion for AI.
- **Participants** must have a computer with internet access.
- ➤ Mode of Conduction: Online, ensuring accessibility for all attendees.
- > Prerequisites: Basic knowledge of Python and machine learning concepts