## **About Institution**

CMR Institute of Technology (CMRIT) is a premier Engineering institution affiliated to Visvesvaraya Technological University, Belagavi, approved by AICTE, New Delhi and recognized by the Government of Karnataka. Recently accrediated by NAAC with A++ grade. The institution was established in the year 2000 by CMR Jnanadhara Trust.

## **About Department**

he Department of Information Science & Engineering established in the year 2000, offers an undergraduate program where students learn core computer aspects such as software, networking, programming, operating systems, web development, and database management. The program also lets students master aspects such as the Internet-of-Things (IoT), cyber forensics, artificial intelligence, biometric management, and software development

# **Objectives Of Workshop**

The objective of the FDP is to focus on generative AI cater to a wide range of audiences, including students, developers, data scientists, artists, researchers, and professionals interested in exploring the capabilities and creative potential of AI-generated content. The workshop serves as a platform for both beginners and more experienced individuals to delve into the fascinating world of generative AI, fostering learning, creativity, and innovation in this rapidly evolving field.

# **About Workshop**

Over the recent years, the AI industry has experienced tremendous growth with innovations and is poised to drive significant changes in the way we live and work. Generative AI is a type of AI technology that focuses on generating new data or content that is similar to the examples it was trained on. Industry requires individuals who not just understand the technical aspects of AI, but also its practical applications in businesses. This requirement has been fulfilled by Generative AI through its models which are capable of creating new content such as images, texts, music, and more, often by learning patterns and structures from large datasets. Focussing on the above requirement a workshop has been arranged that typically covers various aspects of generative models, providing participants with hands-on experience, theoretical knowledge, and practical skills in creating and understanding AI-generated content.

### **Patrons**

Shri K. C. Ramamurthy Chairman, CMRGI Dr. K. C. Sabitha Ramamurthy President, CMRJT, Chancellor, CMR University Shri. K.R. Jayadeep CEO, CMRGI, Pro-Chancellor, CMR University

### **Advisory Committee**

Dr. Sanjay Jain, Principal, CMRIT Dr. B. Narasimha Murthy, Vice-Principal, CMRIT Dr. M. Farida Begam, HOD, Department of ISE

## **Workshop Coordinators**

1.Dr. S. Seetha, Associate Professor ISE Department, CMRIT Bengaluru.

2.Dr. M. Poorani, Assistant Professor ISE Department CMRIT Bengaluru.



National Workshop on Generative AI - Models, Tools & Applications



DATE: 8/1/24 to 2/1/24



CMR Institute of Technology, #132, AECS Layout, ITPL Main Road BENGALURU-560037

# **Workshop Contents**

#### **Workshop Contents**

The various sessions of the STTP includes,

- 1. Introduction to Generative Models (GANs)
- 2. Variational Autoencoders (VAEs)
- 3. Text Generation Models (RNNs, LSTM,

**Transformer Models, BERT)** 

4. Style Transfer, Image to Image transfer &

Deepfake

- 5. Langachain Application Development
- 6. Application Specific Models

All the sessions are mostly focused with Hands on coding session for the participants, which allow them to work with different coding framework and tools that were used to implement generative Al models. Discussions or case studies showcasing real-world applications of generative Al across various domains such as art, design, music, text generation, image synthesis, healthcare will be done. This provides insight into how generative models are being used in different industries. Finally ethical implications of generative Al, including issues related to bias, fairness, privacy, and responsible use of Al-generated content will be discussed.

### **PRERWQUISITES**

Prerequisites: Basic coding and conceptual knowledge in Python or any programming

### **ELLIGIBILITY**

1. All the faculties & Research Scholars from AICTE approved institutions are eligible.

- 2. Students of M.Tech./B.Tech/ Ph.D with any specialization are eligible to apply.
- 3. Limited Number of participants.
- 4. Participants will be selected on first-come first-served basis.
- 5. The online registration is mandatory.

## **Registration Fees**

Pay registration fee of ₹ 500/- online using

the following details:

**Beneficiary Name: CMRIT HOD ISE** 

**Bank Name: Bank of India** 

Branch: AECS Layout, Bengaluru

A/c No: 843410110003987 IFSC Code: BKID0008434

# **SESSION DETAILS**

SL.NO	DATE	RESOURCE PERSON	TOPICS TO BE COVERED
1	08.01.24	Dr. Muneendra Ojha Assistant Professor Department of Information Technology Indian Institute of Information Technology - Allahabad	Introduction to Generative Adversarial Networks (GANs) & Conditional GANs (cGANs)
2	09.01.24	Dr. S. Krithika, Assistant Professor, School of Computing, VIT Chennai	Conditional GANs (cGANs)
3	10.01.24	Dr. Sathya, Senior ML Engineer, Avalara Technologiea, Chennai	Text Generation Models, Application- Specific Session
4	11.01.24	Dr. THANGAVEL MURUGAN, Assistant Professor, Dept. of Information Systems & Security, College of Information Technology, United Arab Emirates University, Al Ain, UAE	Style Transfer and Image-to- Image Translation & Deep Fake



#### Contact Details:

Dr. S. Seetha, Associate Professor ISE Department, CMRIT Bengaluru. Cell: 7708406505 E-mail:seetha.s@cmrit.ac.in

Dr. M. Poorani, Assistant Professor ISE Department CMRIT Bengaluru Cell:87544 08132 Email:poorani.m@cmrit.ac.in