

Foundations of Generative AI

Lab 1: Prompt Engineering, Image Generation, and Video Creation

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Course: Foundations of Generative AI (2025–2026)

Institution: RV University, Bengaluru

1 Objective

The objective of this laboratory exercise is to gain practical experience in using Generative AI tools for professional content creation. The lab focuses on structured prompt engineering, AI-based image generation, and AI-powered video creation using modern GenAI platforms.

2 Tools Used

The following tools were used in this experiment:

- Claude (for email generation)
- DALL-E (for poster generation)
- Fliki.ai (for video creation)

3 Task Description

A promotional campaign was created for a university workshop titled “*Foundations of Generative AI and Its Applications*” to be conducted at RV University, Bengaluru. The campaign included:

- A formal workshop launch email
- A professional AI-generated poster
- A short narrated promotional video

4 Email Draft Generation using Claude

The launch email was generated using the Claude large language model. A structured prompt was designed using Role, Task, Context, and Constraints to ensure a professional and complete academic announcement.

4.1 Email Prompt Used

Role:

Act as a professional academic coordinator at RV University.

Task:

Draft a formal launch email announcing a one-day workshop on "Foundations of Generative AI and Its Applications."

Context:

The workshop is organized for undergraduate engineering students at RV University, Bengaluru. The venue is Lecture Hall Complex, RV University, Bengaluru. The event will be held next Friday.

Constraints:

The email must include the purpose of the workshop, date and venue, target audience, key topics, benefits, registration instructions, and contact information. The tone should be professional and motivating. The length should be between 180 and 200 words.

4.2 Email Generated by Claude

Subject: Workshop Announcement - Foundations of Generative AI and Its Applications

Dear Students,

The Department of Engineering at RV University is delighted to announce a one-day workshop on "Foundations of Generative AI and Its Applications" for undergraduate engineering students.

Purpose:

This workshop aims to introduce students to the fundamental concepts of generative AI and demonstrate its transformative applications across engineering disciplines.

Event Details:

Date: Friday, January 17, 2026

Time: 9:30 AM - 4:30 PM

Venue: Lecture Hall Complex, RV University, Bengaluru

Key Topics:

- Introduction to generative AI and machine learning basics
- Popular AI tools: ChatGPT, DALL-E, and GitHub Copilot
- Applications in software development, design, and research
- Hands-on demonstrations and interactive sessions

Benefits:

Participants will gain practical insights into leveraging AI tools for academic projects, research, and career readiness in an AI-driven industry.

Registration:

Register by January 15, 2026, via the university portal or email genai.workshop@rvu.edu.in with your name, registration number, and branch.

Contact:

For further information, contact the Academic Coordination Office at +91-80-XXXX

Warm regards,

Academic Coordination Office

RV University, Bengaluru

5 AI Poster Generation using DALL-E

A professional workshop poster was generated using DALL-E based on a detailed visual prompt.

5.1 Image Prompt Used

Create a high-resolution professional digital poster for a university-level workshop titled "Foundations of Generative AI and Its Applications."

The workshop is being held at RV University, Bengaluru, in the Lecture Hall Comp

The poster should visually represent a modern Indian university environment with

- Engineering students working on laptops and tablets
- AI and technology-themed visuals such as neural networks and futuristic interf
- A classroom or lecture hall setting

Design style and constraints:

- Color theme: blue and white
- Style: clean, modern, poster-style layout
- Include subtle technology and innovation motifs
- Include a dummy QR code with the text "Register Now"
- The image should look formal, polished, and suitable for university promotion.

5.2 Generated Poster

6 AI Video Creation using Fliki

A 30-second narrated promotional video was generated using Fliki.ai by converting a structured script into video scenes.

6.1 Video Prompt Used

Act as a professional promotional script writer for university events.

Create a 30-second promotional video for a workshop titled

"Foundations of Generative AI and Its Applications" at RV University, Bengaluru.

First outline the flow:

- Opening hook
- What the workshop is about
- What students will learn
- Who should attend
- Call to action

Then write the final narration script using short, clear sentences suitable for AI voice-over.

6.2 Video Link

https://drive.google.com/file/d/1Zj1dfqHNuLY4ZI_LLk95zuFxLC6Gn_f5/view

7 Conclusion

This lab demonstrated a complete Generative AI workflow involving prompt engineering, AI-based text generation, image creation, and video production. By integrating Claude, DALL-E, and Fliki.ai, a professional academic promotional package was successfully produced for a university workshop.

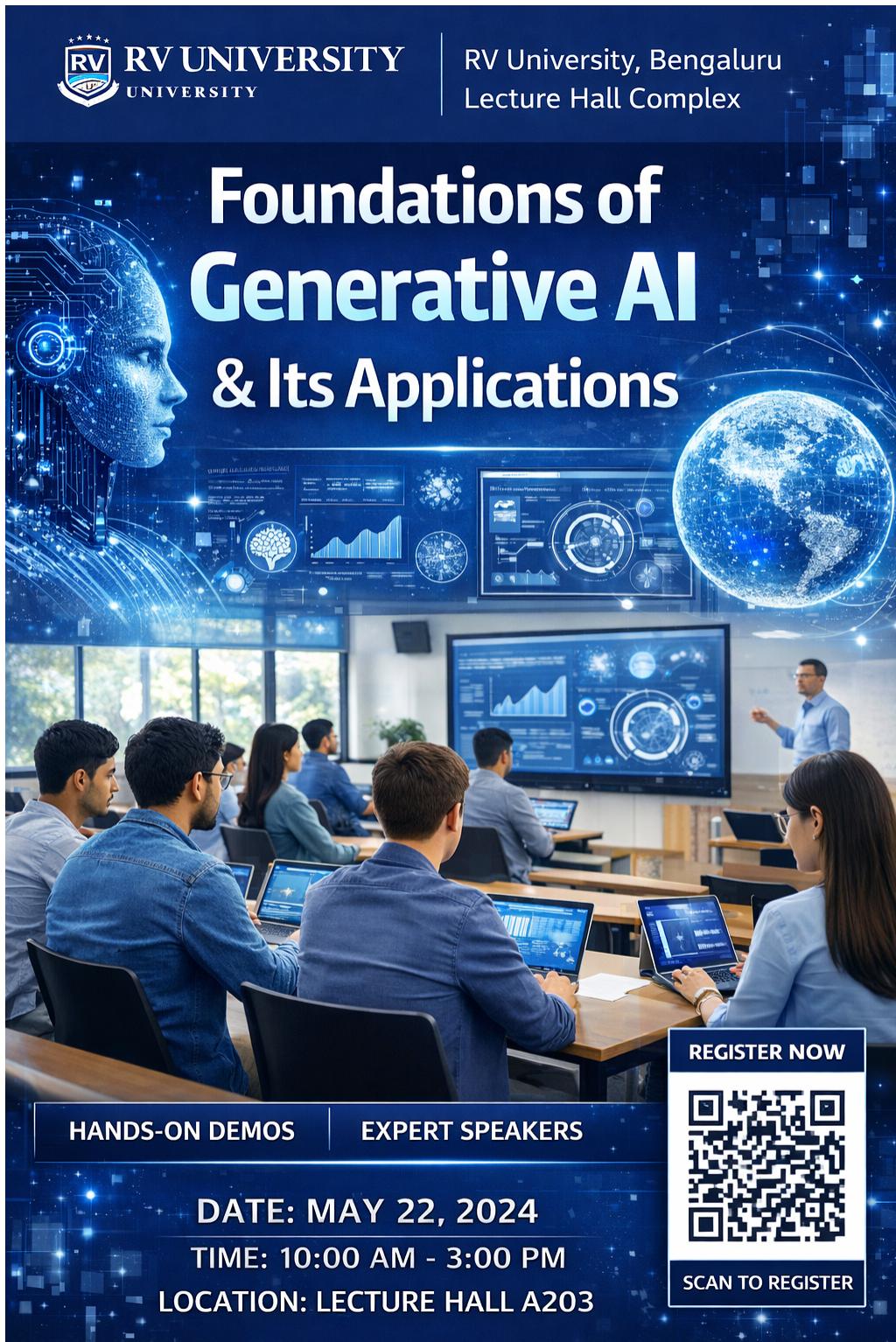


Figure 1: AI-generated workshop poster using DALL-E