

Report on the Workshop: Leveraging Generative AI Capabilities



Date: 7th October 2024

Organized by: Optizone (Society Of Operational Research)

Facilitator: Dr. Veena Jain (Convenor, Optizone Society,)

Speaker: Dr. Shivani Bali, Jaipuria Institute Of Management

Participants: 110 Students from different courses Of Deen Dayal Upadhyaya College, University Of Delhi

Introduction

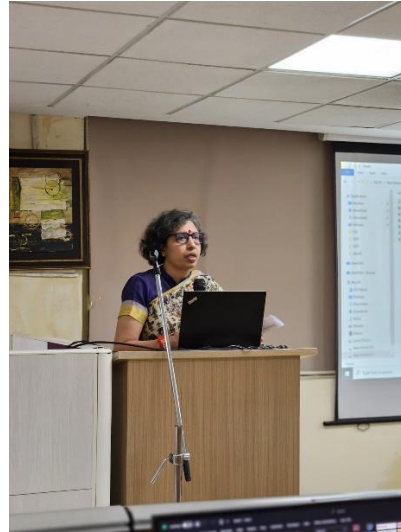
On October 7, 2024, Optizone Society hosted a workshop on the applications and tools of Generative AI (Gen AI) to increase productivity in daily life and professional scenarios. The event was led by Dr. Shivani Bali, a distinguished professor from the Jaipuria Institute of Management, along with **Dr. Veena Jain**, the Convenor of Optizone Society. The workshop introduced students to the Magic of Generative AI tools to navigate this technology, and techniques such as prompt engineering to unlock the full potential of AI models.

Workshop Aims

Dr. Shivani Bali outlined the following key objectives:

1. Magic of Generative AI: Discovering how Gen AI tools are transforming industries and simplifying daily tasks.
2. Navigating Generative AI Tools: A hands-on approach to using AI-driven platforms to achieve professional outcomes.

3. Learning from Prompts: Understanding how prompt engineering can help tailor AI outputs for specific needs.



The event began with D. Veena Jain, the convenor of the society, introducing the theme of the workshop and explaining its importance and purpose for the students. She then introduced the invited guest, Dr. Shivani Bali, and provided an overview of her background. Following the introduction, she asked our President, Abhay Yadav, to felicitate Dr. Shivani Bali. Dr. Shivani Bali then started the workshop by explaining the increasing relevance of artificial intelligence (AI) in various fields and highlighting its daily use in applications such as Alexa, Google Maps, and chatbots. She highlighted the importance of making students comfortable with AI as they regularly engage with it, even without realizing it. Dr. Bali's experience and insights set the tone for the workshop, ensuring participants could relate AI concepts to real-life applications.

Understanding Generative AI

Generative AI was introduced as a powerful subset of AI designed to create new content across various media. Dr. Bali provided a clear distinction between text and image generation and demonstrated how Gen AI tools could be harnessed effectively.

Generative AI Capabilities Discussed

1). Content Generation:

Tools: ChatGPT, Gemini

Use Cases: Creating blogs, articles, and summaries.

Limitation: Hallucination risks, where AI produces misleading or false content.

2. Image Generation:

Tools: DALL-E, Adobe Firefly, Midjourney

Use Cases: Design and artwork generation for professional and personal projects.

3). Presentation Creation:

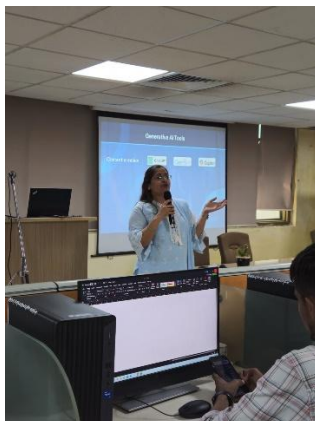
Tool: Gamma

Use Cases: Automated, professional-quality presentations generated with minimal input.

4). Quizzes and Learning Tools:

Tool: Quiz

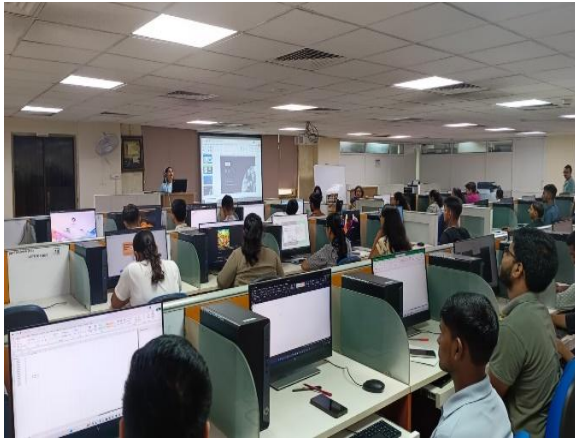
Use Cases: Interactive quizzes for classroom and self-paced learning.



Focus on Prompt Engineering

Dr. Shivani Bali emphasized the importance of Prompt Engineering, explaining that the key to unlocking AI's full potential lies in how users communicate with it. Key points included:

Best Practices: Avoid giving personal data, humanize your prompts by clarifying assumptions, and make inputs as specific as possible.



Chaining Method: Dr. Bali explained this method, where complex tasks are broken down into smaller components to guide AI models more effectively.

Live Demos and Practical Application

The workshop featured live demonstrations where students were shown how to interact with Generative AI tools. Dr. Bali and Dr. Veena Jain guided the participants through practical examples of content generation using ChatGPT and Gemini. The participants also explored:

1).Summarization Tools: Using AI like Gamma for summarizing large texts or reports.

2).Text-to-Image Tools: Converting descriptive text into high-quality images using tools like DALL-E.

3)AI for Communication: Generating AI-driven reports and presentations to enhance productivity in academic settings.



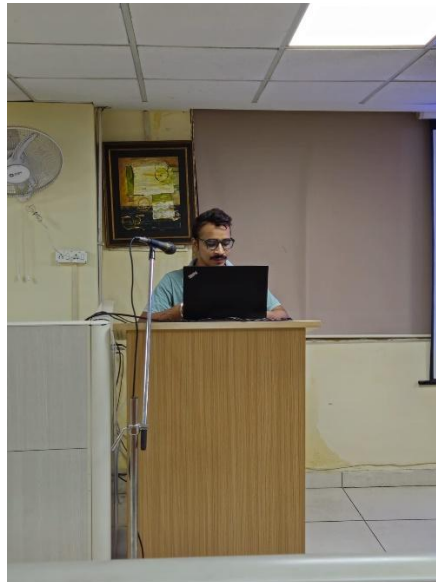
Hands-On Activity

As part of the interactive session, participants engaged in crafting prompts for AI-generated content. They explored how different types of inputs would affect the outcomes, learning how to optimize their prompts for more precise results. For instance, students used prompt chaining to create detailed images and reports, enhancing their understanding of AI's capabilities.

Feedback and Closing Remarks

Dr. Shivani Bali concluded the session by discussing the future of AI and encouraging students to continue exploring its applications. The workshop provided a solid foundation for students to further their understanding of Generative AI, and how it can be ethically and effectively used in solving real-world problems.

After her closing remark our Vice President Shiva Bhardwaj gave Vote of Thanks to Dr. Shivani Bali, Dr. Veena Jain and all the participants for coming and becoming the part the workshop.



Conclusion

The workshop, spearheaded by Dr. Shivani Bali and Dr. Veena Jain, offered a comprehensive introduction to the potential of Generative AI. Students gained valuable insights into how AI can be applied to everyday tasks, academic work, and professional environments. The combination of theory and practical activities provided a well-rounded learning experience, empowering students to utilize AI tools confidently.

Prepared by:

Optizone Team

