



DEPARTMENT OF CSE (DATA SCIENCE)

“Prompt Engineering and RAG”

Venue: Room C222

Time-10:00 AM-1:00PM



WORKSHOP

Prompt Engineering and RAG



7th November 2025



10:00 AM – 01:00 PM



C222, Chhatrapati Shivaji Block



3rd Semester Students



Mr. Vinod Tigadi
Sr. Engineering Manager
Enphase Energy

Faculty Coordinator
Prof. Sandhya B S
Asst. Professor - CSE (DS)

Convenor
Dr. B Swathi
HoD - CSE (DS)

Dr. R J Anandhi
Dean - Academics

Dr. Manjunatha
Principal

Organised by

Department of Computer Science and Engineering (Data Science)

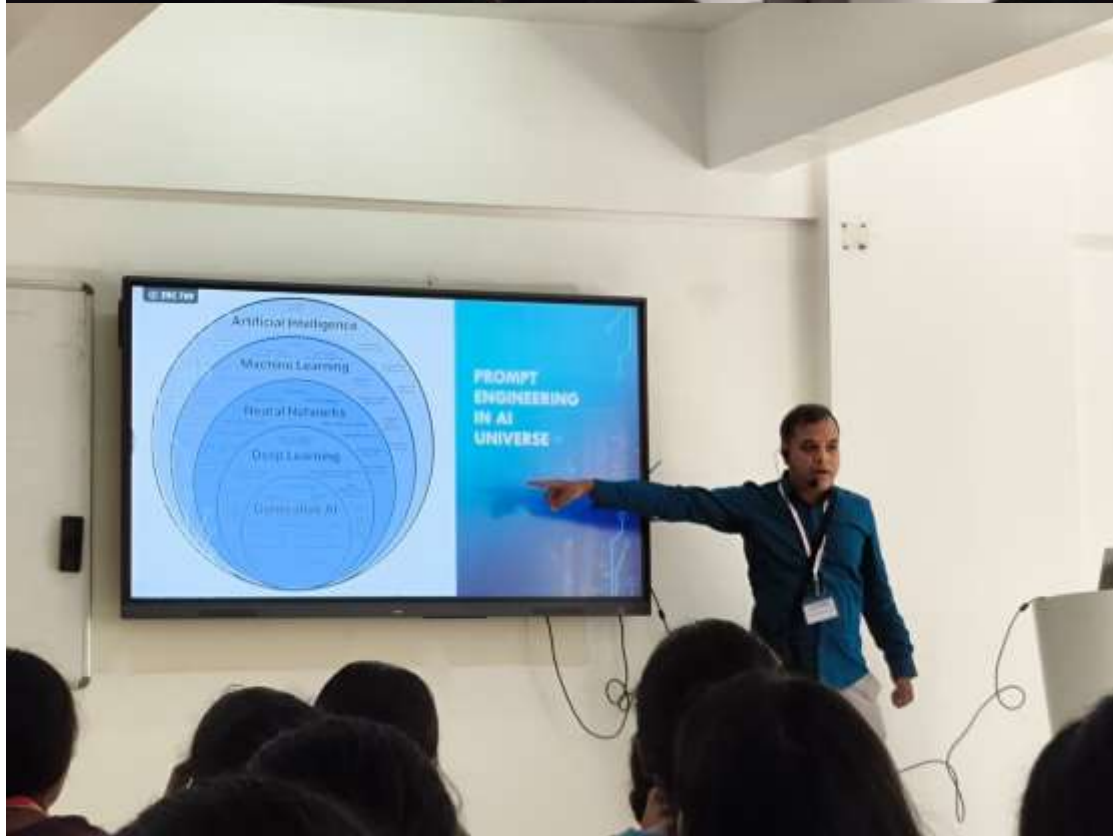
In Association with

Computer Society of India Student Chapter

The Department of Computer Science and Engineering (Data Science), New Horizon College of Engineering, organised a workshop titled “Prompt Engineering and RAG” on 7th November 2025 for the 3rd semester students. The session was conducted by Mr. Vinod Tigadi, Sr. Engineering Manager at Enphase Energy.

A workshop on Prompt Engineering and Retrieval-Augmented Generation (RAG) for the 3rd-semester data science students would introduce foundational and highly practical AI skills that are increasingly essential for the field. Students would get both conceptual knowledge and hands-on ability to develop, test, and deploy advanced AI applications that use large language models (LLMs) in smarter, more accurate ways. The fundamentals of Prompt Engineering: how to craft queries that maximize LLM performance, improve accuracy, and minimize bias.





The workshop on Prompt Engineering and Retrieval-Augmented Generation (RAG) covered the following key areas:

Understanding how to design effective prompts to guide large language models (LLMs) for generating accurate and relevant outputs. This included principles of clarity, specificity, and iterative refinement of prompts to optimize AI responses.

Explanation of Retrieval-Augmented Generation as a method to combine LLMs with external knowledge sources. Students learned how RAG enhances AI models by retrieving relevant information from documents or databases to produce fact-based, context-aware answers.

Practical sessions where students created and tested various prompts for tasks such as data analysis, question answering, and content generation, learning how subtle changes in wording impact model performance.

Demonstrations and exercises on building RAG pipelines using popular tools, showing the interaction between the retriever components that fetch external data and the generative model that produces the final output.

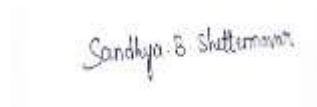
Exploration of real-world scenarios where Prompt Engineering and RAG improve AI tasks in research, automation, and data-driven decision making.

Students worked collaboratively to solve problems by designing prompts and leveraging RAG to deliver accurate, knowledge-grounded responses.

The workshop taught students how to effectively craft prompts to get the best out of LLMs and how to build systems that retrieve and feed external domain-specific

or real-time knowledge into these models for smarter AI applications. By learning both, students gain foundational skills to develop AI tools that are both creative and grounded in accurate, current data - an essential competency in modern data science.

This combination equips data science students with practical techniques to build AI-powered solutions that can answer complex queries, automate research and analysis tasks, and adapt to continuously changing information without expensive retraining.



Faculty Coordinator

Assistant Prof.

Prof. Sandhya B S



Convenor

HoD-CSE-DS

Dr. B Swathi