Centre for High Performance Computing 2025 National Conference



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How custom chatbot works and how to build a RAG (Retrieval-Augmented-Generation) system from scratch

Sunday, 30 November 2025 09:00 (1h 30m)

This hands-on workshop introduces students to building a basic Retrieval-Augmented Generation (RAG) system. Participants will learn how to index a document corpus using embeddings, implement a vector search retriever, and connect it to a language model for context-aware responses. The session covers key components like vector store, prompt design, and system evaluation. By the end, students will have built a simple, working RAG pipeline. Basic Python knowledge is recommended.

Requirements:Each attendee should bring their laptop along and have Jupyter notebook with python 3.10 pre-installed.

| pre-installed. | |
|--------------------------------|--|
| Presenting Author | |
| Email | |
| Student or Postdoc? | |
| Institute | |
| Registered for the conference? | |
| CHPC User | |
| CHPC Research Programme | |

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Session Classification: Workshop

Track Classification: Machine Learning and other AI techniques