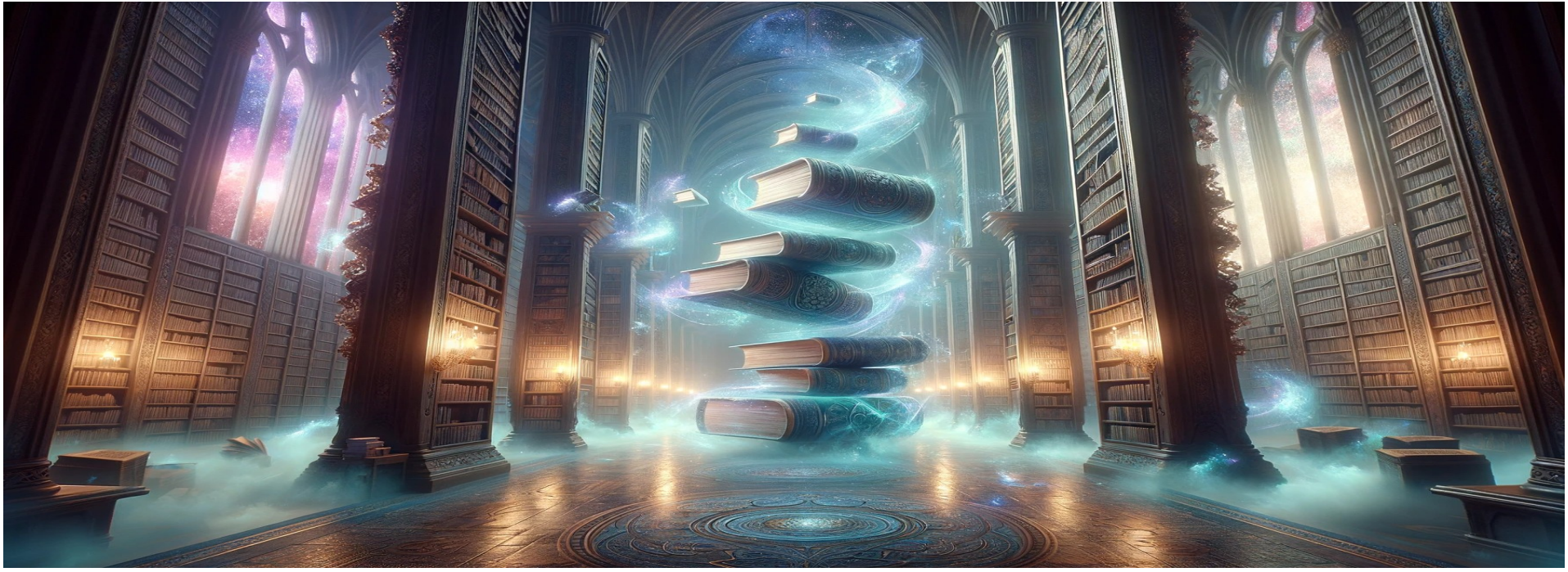
Athena – Research Companion



What is Athena?

AI-Assist to faciliate scientific Research with:

- Advanced Semantic Search
- Human-AI Collaboration
- Comprehensive Admin Support

Cohere-powered Tasks

- Enrich Paper Abstracts w/ Knowledge-Base
- Prepare Glossary of Technical Terms
- Find similar Papers
- Find relevant Papers in a given Research Topic
- Compose E-mail to Authors
- Write a Tweet about a Paper

Steps

- Dataset Creation
- Embeddings and Indexing w/ Weaviate
- Prompt Templates, Output-Formatting, Validate
- Cohere Engine Abstraction
- Demo App

Datasets Creation w/ Embed-v3

- 50K ArXiv Papers' Metadata w/ Embeddings.
- Made available to the OpenSource community:
  - https://huggingface.co/datasets/dcarpintero/arXiv.cs.AI.CL.CV.LG.MA.NE.embedv3
  - https://huggingface.co/datasets/dcarpintero/arXiv.cs.CL.embedv3

Enhanced Generation

- Prompt Templates
- Langchain Expression Language
- Pydantic

https://athena-research.streamlit.app/