

Enhancing the development of scientific software with Large Language Models

The project focuses on developing AI agents based on instruction-tuned large language models (LLMs) that can leverage existing documentation and codebases, understand contextual information, interact with external APIs, and communicate with users in natural language. The student will integrate these capabilities into the Cherenkov Telescope Array Observatory pipelines for both operations and offline data analysis. The project objectives include the embedding of relevant knowledge bases, implementing the required interfaces, and assessing the effectiveness of retrieval-augmented generation.

Group

Z_DV

Project Category

B5. Computing

Special Qualifications

good Python programming skills; basic knowledge on large-language models, experience with their prompting

DESY Site

Zeuthen

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