

Introduction to LangSmith

Instructor

Dipanjan Sarkar

Head of Community & Principal AI Scientist at Analytics Vidhya

Google Developer Expert - ML & Cloud Champion Innovator

Published Author

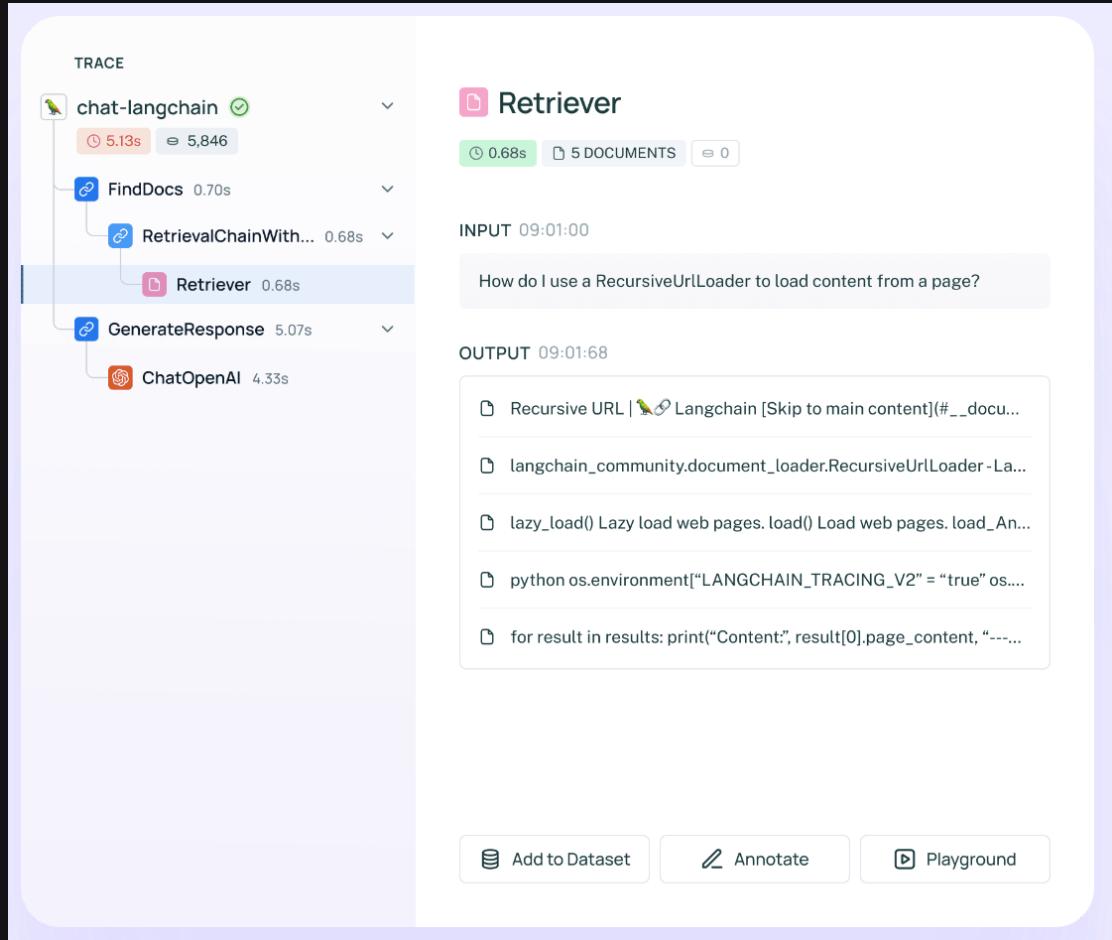


Understanding LangSmith

The screenshot displays the LangSmith application interface. On the left, the 'AgentExecutor' run details are shown: 'TOTAL TOKENS' (5,271), 'HUMAN' input (JSON code), and 'RUN' output (AI response JSON). On the right, the 'RUN TREE' pane shows a hierarchical structure of runs. The root node is 'Chain' (AgentExecutor, 13.57s, 5,271 tokens). It branches into 'Chain' (LLMChain, 1.46s, 144 tokens) and 'Tool' (Search, 2.87s). The 'Tool' node further branches into 'Chain' (LLMChain, 1.97s, 2,037 tokens) and 'Tool' (Search, 3.50s). Each node includes a 'Rate run' button, an 'Add to dataset' button, and a 'Share' button.

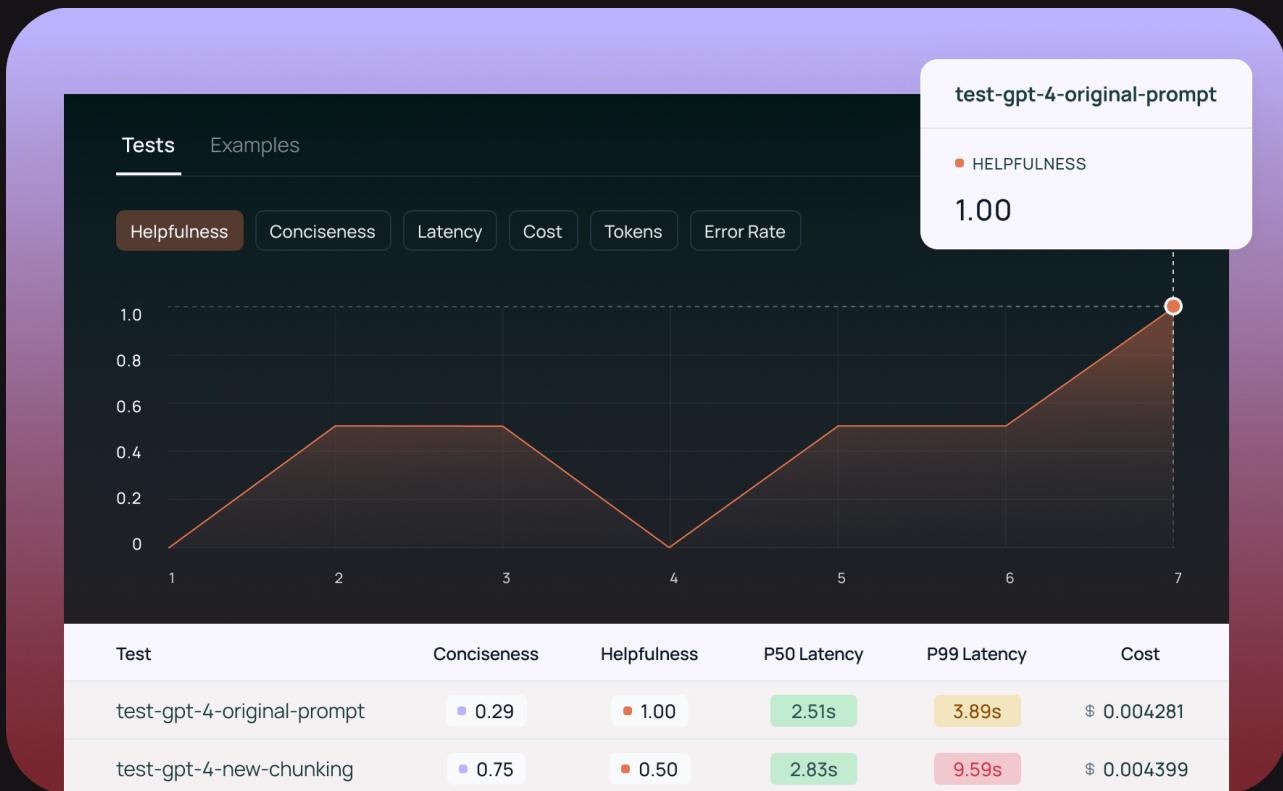
- A unified platform from LangChain, for debugging, testing, evaluating, and monitoring LLM applications
- Helps to easily track changes, debug, run and evaluate any LLM application and agents

Developed with more visibility



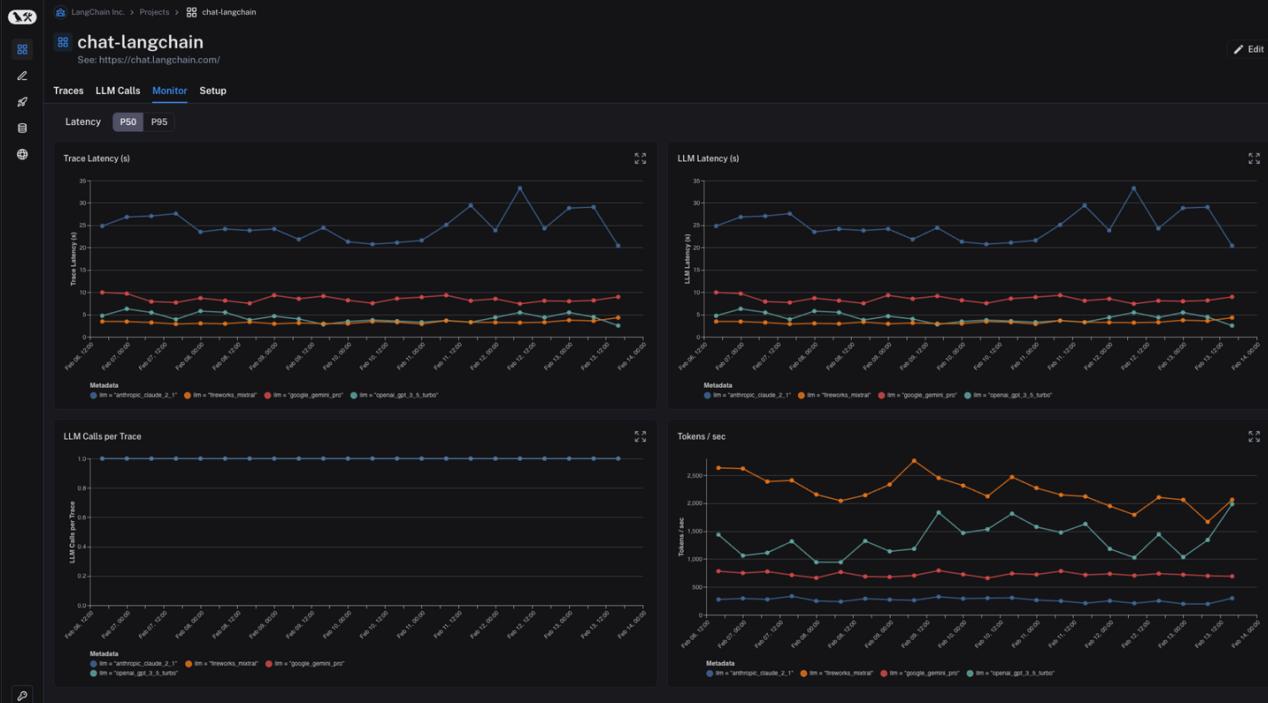
- LangSmith allows to have complete visibility into the entire sequence of calls.
- Help in finding out errors and performance bottlenecks in LLM applications
- Makes it easy to debug and experiment with LLM apps.

Test & Evaluate LLM Apps



- LangSmith allows us to receive human feedback during LLM app runs or utilize AI-assisted evaluation methods.
- The reference LangSmith datasets can be used to test the LLM app.
- Supports both offline and online evaluation to test for problems and drift
- Has many pre-built and custom evaluators that can check for relevance, correctness, harmfulness, and more

Monitoring in Production



- LangSmith provides full visibility into the operations of a production application
- LangSmith offers monitoring charts that enable tracking of key metrics over time
- Charts such as Trace Latency, Tokens/Second, Cost, and Feedback are available for viewing

Thank You
