

☐ Local LLM?

OpenAI LLM

- ☒ GPT-4o  
☐ GPT-4o-mini

LLM Agent

Recursor  
Advisor Rater

Threshold:

50  
0 100

Maximum depth

2  
1 4

☒ Extract relations?

☒ Show trace?

Topic to explore:

improving LLM reasoning  
with Logic Programming  
tools

Prompter:

- ☒ scientific\_concept\_explorer  
☐ consequence\_prediction  
☐ causal\_inference  
☐ step\_by\_step\_guidance\_to\_achieve\_a\_goal  
☐ recommender\_system  
☐ supporting\_arguments\_for\_a\_thesis  
☐ cons\_and\_pros\_for\_a\_thesis  
☐ explorer\_of\_negative\_consequences

Activate LLM!

Visualize relation graph!

Browse relation graph in  
new tab!

Clear OpenAI key!

# Streamlit-based DeepLLM Client

## 1.6.0

STARTING!

CLAUSES

```
'improving LLM reasoning with Logic Programming tools':-
    'Enhanced inference capabilities';
    'Logic-based reasoning frameworks';
    'Structured knowledge integration'.
'Enhanced inference capabilities':-
    'Inference optimization techniques',
    'Logical reasoning frameworks',
    'Enhanced reasoning algorithms',
    'Knowledge representation models',
    'Deductive reasoning systems';
'Inference optimization techniques':-
    'Rule-based inference enhancement';
    'Probabilistic reasoning algorithms';
    'Constraint satisfaction methods';
'Rule-based inference enhancement':-
    'Rule-based reasoning',
    'Inference optimization techniques',
    'Logic programming tools',
    'Enhanced inference capabilities',
    'Knowledge representation systems'.
'Probabilistic reasoning algorithms':-
    'Bayesian network inference',
    'Markov chain models',
    'Probabilistic graphical models',
    'Stochastic sampling methods',
    'Belief propagation algorithm'.
'Constraint satisfaction methods':-
    'Constraint satisfaction problem',
    'Backtracking search algorithm',
    'Consistency enforcement techniques',
    'Constraint propagation methods',
    'Domain reduction strategies'.
'Logical reasoning frameworks':-
    'Deductive reasoning systems';
    'Rule-based inference engines';
    'Formal logic solvers'.
'Deductive reasoning systems':-
    'Deductive reasoning frameworks',
    'Automated theorem proving',
    'Logical inference engines',
    'Rule-based systems',
    'Formal verification methods';
    'Rule-based inference engines';
    'Automated theorem proving';
    'Logical knowledge representation systems';
    'Rule-based inference engine';
    'Predicate logic structures';
    'Automated theorem proving systems';
'Rule-based inference engines':-
    'Deductive reasoning systems',
```























