Request For Proposal

Project name:	Tools for Knowledge Graphs and LLMs integration		
Complexity	***	Round 3 Pool	S
Max award per proposal	\$40,000 in AGIX	Max amount for all proposals to be awarded in this round	\$100,000
Expected lead time	2-4 months after being awarded	Requirements	See <u>below</u>

Context

The SingularityNET tech team is excited to collaborate with the Community on specific platform features through this new format. Pool S of Deep Funding will focus on specific features requested by the internal platform team. This aligns with our emerging platform strategy, preparing for the AGI revolution powered by Neuro Symbolic LLMs and OpenCog Hyperon. The strategy includes enhancing the platform with external Memory- and Neuro Symbolic enhanced Large Language Models, tools for Knowledge Graphs, and a dedicated LLM API. This approach enables developers to create solutions that enhance LLM strengths. The goal is to build the Internet of Knowledge, a key ingredient for decentralized AGI.

And here is the Request for Proposal from the Community on the one specific feature.

Project description

The main goal of this proposal is to stimulate research and development in the area of Knowledge Graphs and their integration with LLMs. This request is intentionally rather wide and not very concrete. We request different tools to work with knowledge graphs which can be useful in the future research and development of Knowledge graph powered LLM. The main requirement is that the proposed tool should be an original work, not a simple wrapper for existing solutions.

Examples of required Solutions

- Tools for importing data to a graph database.
- Natural language string to graph database query transfer tools.
- Tools that use access to the knowledge graph for fact-checking the output of generative language models to mitigate the hallucination effect.
- Online web retrieval tools for fact-checking knowledge graph content and making scheduled relevant updates.
- Tools for online retrieval on the web of an expert level with a selection of reliable sources to provide generative language models with relevant and up-to-date data.

Functional Requirements

 Proposed original tool should be useful for the future research and/or development of KG powered LLMs.

Technical Requirements

The proposed tool should be an original work, not a simple wrapper for existing solutions.

Main proposal requirements

We would really like you not to limit yourself to unnecessary restrictions and focus on creativity, but there is some information your proposal should contain anyway:

- In general terms, the way you propose to solve the problem.
- The requested funding amount.
- Sufficiently detailed information on your project and your team.
- A milestone plan with related costs.

Assessment criteria

- Demonstration of the functionality of the tool with three arbitrary but different use cases.
- Correspondence to one of the examples of the "Examples of required Solutions" section or a tool that
 goes beyond the examples with a detailed rationale for the usefulness and practical value in achieving
 the integration of generative language models with KGs.

In addition to this, the proposal will need to comply with all regular Deep Funding rules.



Please refer to the <u>The General Rules And Conditions</u> of Deep Funding portal for details on the proposal submission and further processes around the SNET RFP Pool.