## **PostDoc Proposal in artificial intelligence**

## **Improving reasoning with LLMs and s**

## **Advisor (s)**: Philippe Muller/ Nicholas Asher – [philippe.muller@irit.fr](mailto:philippe.muller@irit.fr),asher@irit.fr

## https://www.irit.fr/ ~Nicholas.Asher/

## **Net salary**: according to experience

**Duration**: 24 months

**Location**: ANITI cluster B612

**Subject**: Computer Science Research

## **DESCRIPTION**

Faithful  content representations for reliable reasoning with current architectures like LLMs continue to pose challenges. In the context of the aniti synergy chair c3po, we are seeking a post doc interested in working on this topic. C3PO is an interdisciplinary chair geared toward the study of building novel multimodal representations shared among various data gathering and reasoning modules. A novelty of our approach is that reasoning modules may also contribute to the common representation.

We are looking for someone with expertise in machine meaning but also formal methods, as well as familiarity with how components based on these approaches can be fruitfully integrated so as to take full advantage of both the rich knowledge encoded in LLMs and the structural constraints from formal methods.

## **REQUIRED SKILLS**

Familiarity with machine learning methods, transformer architectures, as well as formal methods and logic. Knowledge of Python. Knowledge of RL methods is a plus.

**APPLICATION PROCEDURE**

Formal applications should include detailed cv, a motivation letter and reference letters.

Samples of published research by the candidate will be a plus.

> applications should be sent by email to: advisor email

More information: [https://aniti.univ-toulouse.fr/](https://aniti.univ-toulouse.fr/index.php/en/)­­