

# POST-DOCTORAL RESEARCHER FOR PROJECT IN ARTIFICIAL INTELLIGENCE

# Post-Doctoral Researcher for Audio Mobility 2030

Advisor(s): J. Marques-Silva - <u>joao.marques-silva@irit.fr</u> and N. Asher -

asher@irit.fr

https://aniti.univ-toulouse.fr/

**Net salary**: according to experience

**Duration**: 12 months

#### **DESCRIPTION**

This post-doctoral position on explainable AI is proposed in the framework of the Audio Mobility 2030 (AM2030) project, which started in April 2023. AM2030 aims at enabling car manufacturers to have their own in-car audio applications, regardless of the operating system. They will be able to deploy a global audio experience and offer the best content and proactive services to drivers. It is positioned as a true road companion that will help consumers adopt eco-responsible behaviors: vehicle self-diagnosis and maintenance reports, advice on driving, and the use of on-board equipment.

Project partners: ETX Studio (Lead), Continental Automotive FRANCE SAS, **Université de Toulouse - ANITI**, École Polytechnique de Paris.

ANITI's role in the project is related to working on human-computer interactions, in particular on natural language understanding. This will include a conversational model that can exploit conversational structure as well as content provided by modern transformer-based models. The model will learn constraints on the user's preferences, from the conversation and from his previous choices.

The conversational assistant will go considerably beyond the art of current finite state dialogue systems but offering transparency guarantees and explainability that large transformer models by themselves do not offer. It will interact with voice-based components as well as a recommendation model for actions based on the information acquired by the conversational assistant.

## **REQUIRED SKILLS**

Applicants should have a PhD in computer science or a related area. Applicants should also have working knowledge of machine learning. Good programming skills are essential; English communication skills are also required.

### **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: <a href="mailto:joao.marques-silva@irit.fr">joao.marques-silva@irit.fr</a>

More information: <a href="mailto:https://aniti.univ-toulouse.fr/">https://aniti.univ-toulouse.fr/</a>