

Nantes, August 2nd, 2023

MALADES Project: Adaptable and Sovereign Large Language Models for the French Medical Domain, Selected for the ANR Specific Themes Call for Proposals in Artificial Intelligence (TSIA) - 2023 Edition

We are delighted to announce that the research project "MALADES: Adaptable and Sovereign Large Language Models for the French Medical Domain," led by Richard Dufour, Professor at Nantes Université, has been selected as part of the Specific Themes Call for Proposals in Artificial Intelligence (TSIA) - 2023 Edition, with the theme "**Giga-models for Natural Language Processing and Multimodal Data**". This ambitious project opens new perspectives in the biomedical field by exploring the integration and adaptation of Large Language Models (LLMs) for specific clinical applications.

With a total budget of 1.4 million euros, the MALADES project will initiate in October 2023, focusing on four major research axes: (1) Study of **legal and ethical aspects** in France concerning LLMs for the biomedical domain. (2) Integration of **vocal interaction** with LLMs through end-to-end approaches, including massive speech data collection. (3) Collection of new original case studies for evaluating **generative language models**. (4) Integration of dynamic and sovereign LLMs for the **biomedical domain**, deployed on constrained hardware resources, and incorporating original approaches to provide additional capabilities through well-managed and verified knowledge bases.

The project consortium brings together internationally recognized partners in the fields of biomedical data management, natural language processing, speech processing, and machine learning. Key partners include **Nantes Université** (LS2N) with Pr. Richard Dufour, Dr. Solen Quiniou, Pr. Emmanuel Morin, Pr. Béatrice Daille, the **Nantes University Hospital** (CHUN) with Pr. Pierre-Antoine Gourraud, Dr. Matthieu Wargny, **Avignon Université** (LIA) with Dr. Mickael Rouvier, Dr. Stéphane Huet, Pr. Yannick Estève, and **Université Aix-Marseille** (LIS) with Pr. Benoit Favre, Pr. Frederic Bechet, Dr. Carlos Ramisch.

The multidisciplinary team brings solid expertise in natural language and speech processing, as well as the use of generative models, to successfully achieve the objectives of the MALADES project, which promises to be a significant advancement in the medical field through the integration of **artificial intelligence technologies for digital sovereignty in France**.

The project received a positive evaluation from the scientific evaluation committee, highlighting its scientific and technical excellence, innovative nature, and relevance for medical and clinical applications. The scientific evaluation committee also acknowledged the feasibility of the work plan and the added value of the consortium.

About Project MALADES: The MALADES project aims to integrate and adapt Large Language Models (LLMs) for biomedical applications by developing **natural language processing** tools tailored to the French medical domain. The project is led by Mr. Richard Dufour, Professor at Nantes Université (LS2N), in collaboration with a consortium of expert partners from Nantes University Hospital, Avignon Université (LIA), and Université Aix-Marseille (LIS).

This project receives financial support from the State managed by the ANR as part of the Artificial Intelligence Program - TSIA Call for Proposals - Giga-models Edition 2023.

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End of press release.