Results of UTTER FSTP Open call 1 for recipients of financial support

Project acronym: UTTER

Project grant agreement number: 101070631

Project full name: Unified Transcription and Translation for Extended Reality

Project Horizon European Unified Transcription and Translation for Extended Reality, funded from the European Union's Horizon Europe Research and Innovation program under Grant Agreement No 101070631, and from the UK Research and Innovation (UKRI) under the UK government's Horizon Europe funding guarantee under Grant No 10039436, launched a FSTP Open Call 1 for recipients of financial support.

The Call closed on 15 October 2023.

A total of 54 proposals were received for this Call. Eight proposals will receive funding for a total amount of 470.965,72 EUR.

The evaluation and selection have been completed. All proposers have been informed about the evaluation results.

Call information

The Call and the respective call details were published on UTTER's website on July 26th, 2023: https://he-utter.eu/#fstp, and on the European commission Funding and tender opportunities website on July 31st, 2023: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/competitive-calls-cs/3722. Both the final decisions and the selected projects are formally communicated, on December 20th, 2023 and published on UTTER's website on December 21st, 2023: https://he-utter.eu/#fstp.

Response to the call in detail

	Number of proposals	Funding requested
Proposals received	54	EUR 2.905.965,00
Eligible proposals	33	EUR 1.854.529,00
Selected proposals	8	EUR 470.965,72

List of selected projects

Recipient's Legal Name	Country	Project Description	Project Duration	Funding Awarded
Université Toulouse III – Paul Sabatier	France	pyannote.mobile aims at extending pyannote speaker diarization open-source toolkit in two complementary directions. The first one is to add streaming speaker diarization support, as it currently only supports offline/batch processing. The second one is to investigate the feasibility of "on device" streaming speaker diarization (as opposed to cloud-based processing): we will develop a streaming speaker diarization proof-of-concept running on mobile (iOS or Android). For both directions, we will aim for the best compromise between accuracy and (algorithmic and computational) latency.	9 months	59.908,75 €
University of Helsinki	Finland	This project explores language model adaptation across multiple languages and domains to improve human-machine interaction, especially for underrepresented languages. It aims to expand language models' capabilities by collecting and fusing data in over 500 languages in various domains, addressing challenges of language diversity. It delves into continual learning methods and adaptation techniques based on existing successful model architectures and open models, increasing the accessibility and applicability of large language models, particularly for low-resource languages.	9 months	56.273,00 €
RE:LAB Srl	Italy	The aim of PenGUIn is to support user experience through an innovative, inclusive, adaptive and usable Graphical User Interface for XR platforms, and study the most appropriate information design framework to support agent tasks and the relative cognitive load in the presented UTTER's use cases - and beyond (e.g., virtual learning, virtual healthcare), to support the achievement of the task objectives. The proposed solution will converge innovativeness, usability and content design in a dynamic of functionality, effectiveness, and ergonomics, according to RE:LAB's methodology "Interaction Engineering". PenGUIn aims to design and test a user-centred design approach to prototype a library of graphical elements that are intuitive, cross-cutting, and compatible with usability criteria.	9 months	57.395,00 €

University of Zagreb, Faculty of Humanities and Social Sciences	Croatia	The project is to develop a large language model (LLM) for the Croatian language and it will be trained on a massive dataset of Croatian text. The project is aligned with the objectives of the call, as it aims to build resources for XR models, extend XR models to new language, and evaluate XR models. The project goals are to collect at least 6 billion tokens of Croatian text and prepare that data for LLM training, create a LLM for the Croatian language using monolingual data only, and evaluate the LLM for downstream tasks. The experimental phase will focus on developing and evaluating the model architecture and training process. The integration phase will involve integrating the LLM into the UTTER platform. The dissemination phase will involve disseminating the project results to the research community and the public.	9 months	60,000,00 €
DFKI GmbH	Germany	SignReality will create a 3D sign language interpreter displayed in Augmented Reality glasses. It will serve as an extension of the UTTER online/hybrid interfaces, aiming at usability and accessibility for deaf and hard-of-hearing people. The app will be based on an XR model consisting of a pre-trained sequence-to-sequence neural network, connected to a framework for geometrical transformations for synthesizing an animated avatar. This will follow a client-server architecture, connected with the SDK of the AR device and via an API to other apps. Participatory design and evaluation in co-operation with the user community is planned. Results will be disseminated to the user and scientific communities, to UTTER and parallel research projects and will be used to initiate further research.	9 months	59.995,22 €
University of Alicante	Spain	This project focuses on developing an AI chatbot to serve as a tutoring assistant for non-native English speakers, enhancing their language skills through post-meeting analysis of meeting transcriptions. This effort aligns with UTTER's objectives, particularly its interest in harnessing language models for video conferencing applications. Following recent advances in LLM-based chatbots and agents, our system will exploit pre-trained large language models, refined for the tutoring task through a mix of in-context learning, external non-parametric memory retrieval, efficient parameter fine-tuning, and tool exploitation. Human evaluation will be conducted through individual debriefings after simulated, scenario-based video conferences with small test groups.	9 months	57.567,50 €

Institute of Computer and Communication Systems, National Technical University of Athens, ICCS-NTUA	Greece	SURE-GB aims to build an automated service that identifies occupation-related under representational, stereotypical, and algorithmic gender bias in machine translation, in English and French, as well as low resource languages like Greek. The proposed method involves creating a curated knowledge graph that a) encodes standardised knowledge and data for occupations (based on data and hierarchies from EU-LFS1, the ESS2, and the International Classification of Occupations-ISCO3), b) incorporates statistics for occupation-related gendered language usage derived from linguistic corpora. Our goal is to develop a ready-to-use machine learning toolkit, that utilises the above knowledge to detect and categorise gender biases for: a) providing actionable recommendations for improvement, b) establishing guidelines for unbiased language translation, c) raising awareness of gender biases in machine translation systems.	9 months	60.000,00 €
Charles University, Faculty of Mathematics and Physics, Institute of Formal and Applied Linguistics	Czech Republic	The goal of the project is to (1) expand existing interactive meeting summarization tools (such as our MinuteMan, or those developed by UTTER) to facilitate cross-lingual access to meeting content (live transcripts and live minutes) and (2) make these tools benefit from human interpretation, if available in the meeting. As a necessary prerequisite, the project will prepare a test set and rigorously evaluate the underlying models of speech transcription, translation and summarization in this setting.	9 months	59.826,25 €