



Project designation | Unbabel Scribe: AI-Powered Video Transcription and Subtitle

Project code | LISBOA-01-0247-FEDER-038510

Main aim | Strengthening research, technological development, and innovation

Intervention region | NUTS II Lisboa

Beneficiary entity | Unbabel, Unipessoal, Lda.

Approval date | 21-01-2019

Start date | 01-02-2019

End date | 31-01-2021

Total eligible cost | 1.055.978,57€

European Union financial support | FEDER – 422.391,43 EUR

Objectives, activities and expected outcomes

The present R&D project, called “Unbabel Scribe: AI-Powered Video Transcription and Subtitle”, aims to generate and materialize new knowledge linked to dynamic, proactive, and predictive transcription and captioning services (so as to bring together artificial intelligence and human intelligence to the same reality). The solution developed through R&D activities aims to contribute, disruptively (on a global level), to a distinctive increase in the quality/scalability of automatic transcription, to the speed of the translation process and, inherently, to a significant reduction in price per minute of video transcribed, leveraging Unbabel’s competitiveness.

In order to achieve these goals, Unbabel intends to engage in a set of industrial research, as well as experimental development activities, involving the whole cycle linked to a unique transcription and captioning method, which includes (i) Deep Learning, (ii) ASR e ART, (iii) Crowdsourcing, (iv) Smartcheck, culminating in the materialization of a new ecosystem support platform conceived by Unbabel for a distributed post-edition (at the level of the transcriber community), developed with the integration of feedback mechanisms.

With this disruptive and distinguished approach, Unbabel intends to redefine the state of the art in the industry, being at the forefront of technology and knowledge. If successful, the solution obtained will develop captions for audiovisual content with unmatched quality on an international level, performed in real time and supported by dynamic learning mechanisms (ecosystem) at extremely competitive prices.

Main Deliverables:

- ART Module for transcription pipeline
- Distributed post-editing tool
- Post editing assisting tool
- Algorithms for automatic transcribers selection
- Algorithms for Quality and Editor evaluation
- Prototype of the Solution
- Peer-reviewed papers in reputable academic journals

Work Project:

- WP1 - Project Management and Coordination
- WP2 - Applied R&D of data collection and processing infrastructure
- WP3 - R&D of ASR and ART modules
- WP4 - R&D of advanced distributed post-editing algorithms for video transcription and segmentation
- WP5 - R&D of algorithm to support the community of editors
- WP6 - Prototyping and experimental development of tradable services
- WP7 - Exploitation and dissemination of the project results