

## Arantza del Pozo, Vicomtech



The European Language Grid has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement № 825627 (ELG).



The logo for vicomtech is displayed in a white, lowercase, sans-serif font. The letter 'o' is stylized with a white arc above it, resembling a speech bubble or a sound wave. The background of the slide is a scenic landscape of rolling hills and mountains under a clear blue sky with a few wispy clouds. The hills are rendered in various shades of teal and blue, creating a sense of depth and atmosphere.

# vicomtech

MEMBER OF BASQUE RESEARCH  
& TECHNOLOGY ALLIANCE

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**Arantza del Pozo**

Director

Speech and Natural Language Technologies

## ABOUT US

We are an Applied Research Centre in Information Technologies,  
specialised in [Artificial Intelligence](#), [Visual Computing & Interaction](#)



vicomtech  
MEMBER OF BASQUE RESEARCH  
& TECHNOLOGY ALLIANCE

Parque Científico - Tecnológico de Gipuzkoa

20009 Donostia / San Sebastián

SPAIN

## WHAT WE DO

Applied research in **digital technologies**

We transfer the results of our projects to businesses, enabling them to improve their processes and become more competitive.

### OUR POSITION IN THE MARKET:



-University  
-Academic Degrees  
**No dependence of the market**

-Technology Transfer accelerator to Industry  
-Research under contract  
**Dependence of the market**

-Industrial improvement  
**Market needs**

## OUR TEAM

180   
STAFF

40%   
PHd

15%   
INTERNATIONALS

# FIELDS OF APPLICATION



MANUFACTURING AND  
PROCESS INDUSTRY



SMART MOBILITY



EHEALTH AND  
MEDICAL DEVICES



DIGITAL SECURITY



ICT AND MEDIA



# SPEECH AND NATURAL LANGUAGE TECHNOLOGIES

## RESEARCH LINES



### SPEECH PROCESSING

Extracting valuable information  
from audio



### NATURAL LANGUAGE PROCESSING

Unlocking the meaning of raw  
text



### MACHINE TRANSLATION

Cracking the language barriers



### DIALOGUE SYSTEMS

Natural human-machine interaction

- Speech Recognition
- Biometrics & Antispoofing
- Speech Synthesis
- Emotion Recognition

- Information Extraction
- Sentiment Analysis
- Question Answering
- Text Summarization

- Text Translation
- Data Exploitation
- Speech Translation
- Text Simplification
- Quality Measurement

- Natural Language Understanding
- Dialogue Management
- Natural Language Generation
- Multimodal Dialogue



# SPEECH AND NATURAL LANGUAGE TECHNOLOGIES

## SW LIBRARIES

Smart specialization through **incremental development**

**Transkit**<sup>®</sup>  
speechprocessing

### Transkit

Technology for the automatic rich transcription of audiovisual content.

**DeepT**<sup>©</sup>

### DeepT

Library for the development of deep learning NLP models

**VicomTTS**<sup>©</sup>

### VicomTTS

Libraries for the natural speech synthesis.

**UMLMapper**<sup>®</sup>

### UMLMapper

Libraries for the semantic annotation of biomedical texts with UMLS.

**itzuli**<sup>©</sup>  
smart translation

### Itzuli

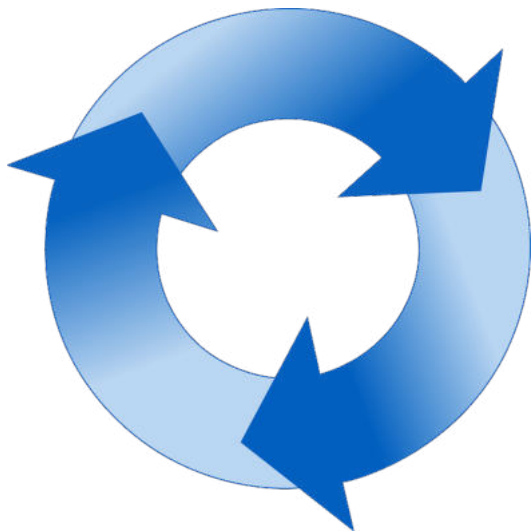
Engine for research, generation and implementation of real-time machine translation solutions and services.

**Adilib**<sup>©</sup>

### Adilib

Libraries for the development of natural language interaction interfaces.



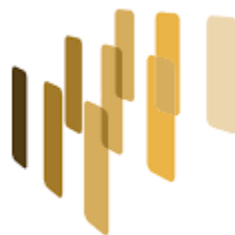


- Main gap: language resources specific to the language and domain/use case of our clients



## RELATION AND VIEW OF THE ELG

- Visibility & access to language resources and the rest of the European LT community
- Uploading corpora & tools we can share. Use of resources, tools and contacts in projects with our clients
- Involvement of local companies in the LT value chain, key to European LT exploitation success



**EUROPEAN  
LANGUAGE  
GRID**