

# Basque Language Speech Recognition & Synthesis

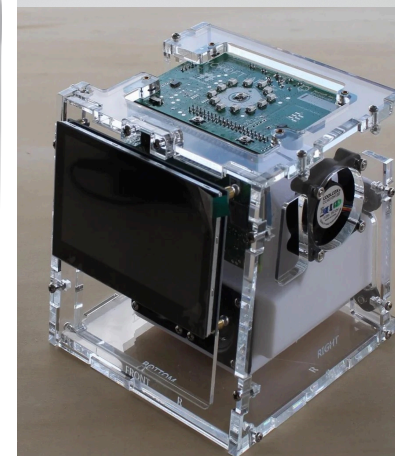
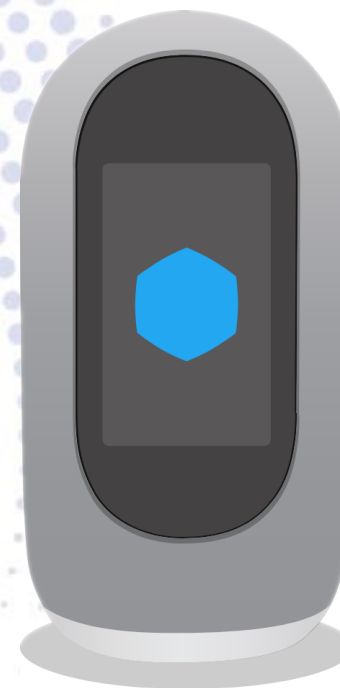
Igor Leturia

Elhuyar Fundazioa

# Elhuyar's Basque ASR and TTS in ELG (Basque smart speaker pilot project)

Igor Leturia – Elhuyar Fundazioa

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## Elhuyar Foundation

- Non-for-profit organization working in the promotion of the Basque language in the areas of science of technology
- Among many other things (popular science, terminology, technical translations...), R&D in speech and language technologies

## Basque smart speaker pilot project

- Basque smart speaker based on open source Mycroft AI
- Makes use of Elhuyar's Basque ASR and TTS services
  - Improved ASR for noisy environments
  - Developed neural TTS and neutral voice
- Localized Mycroft and 40+ skills
- Developed local skills (music, news)



# Elhuyar's Basque ASR and TTS in ELG

- Put Elhuyar's Basque ASR and TTS in ELG
- Proxies that call our online services
- Demos:
  - Limited in time (ASR) and text length (TTS)
  - Limited in calls per day
  - No commercial use allowed (only for evaluation purposes and research)
- Terms of use available
- Commercial service reachable from there:
  - Limit extension
  - Commercial use
  - Web interface or API
  - In ASR, subtitles, edition interface, machine translation, bilingual, live...

The image shows two screenshots of web interfaces for Elhuyar's Basque services. The top screenshot is for the ASR (Automatic Speech Recognition) service. It has a header with the Elhuyar logo, the title 'Elhuyar Basque ASR', and the identifier 'ASR-Elh-eus' with version '1.0.0 (06/07/2021)'. A purple banner indicates it is an 'ELG-compatible service (service running on the provider's side)'. Navigation tabs include 'Overview', 'Download/Run', and 'Try out' (which is active), and a link for 'Code samples'. The main area contains a message 'No audio loaded - select one of the options below' with a play button icon. Below this are two options: 'Use audio from' with a 'MICROPHONE' button (microphone icon) and 'or from' with a 'FILE' button (cloud upload icon). A 'SUBMIT' button is at the bottom. The bottom screenshot is for the TTS (Text-to-Speech) service. It has a header with the Elhuyar logo, the title 'Elhuyar Basque TTS', and the identifier 'TTS-Elh-eus' with version '1.0.0'. A purple banner also indicates it is an 'ELG-compatible service (service running on the provider's side)'. Navigation tabs include 'Overview', 'Download/Run', 'Try out' (which is active), and 'Code samples'. The main area has a text input field with the placeholder 'Type text to speak' and a 'SUBMIT' button below it.

**Elhuyar Basque ASR**  
ASR-Elh-eus  
Version: 1.0.0 (06/07/2021)  
ELG-compatible service (service running on the provider's side)

Overview Download/Run **Try out** Code samples

No audio loaded - select one of the options below

Use audio from **MICROPHONE** or from **FILE**

SUBMIT

**Elhuyar Basque TTS**  
TTS-Elh-eus  
Version: 1.0.0  
ELG-compatible service (service running on the provider's side)

Overview Download/Run **Try out** Code samples


Type text to speak

SUBMIT

# ELG benefits

- Benefits for Elhuyar's services:
  - Visibility of our services in a global display of European LT tools
  - Visibility of Elhuyar itself: customers, partners and projects can learn about and reach us
- Benefits for Elhuyar as user:
  - Search with great filtering options
  - Get an idea of existing resources and tools for Basque or other languages we work with
  - Information about concurrence
- Benefits for the European LT scene
  - Global and thorough display of European LT
  - Option to try many of the services

**895 search results for asr basque**

**Elhuyar Basque ASR**  
version: 1.0.0

72 views  
269 times used


Automatic Speech Recognition service for Basque

Keywords: automatic speech recognition · Basque

Language: Basque

Licence: ELG Elhuyar ASR Terms of Service  
*1 more version exists for this record*

ELG-compatible service

**Elhuyar Basque TTS**  
version: 1.0.0

38 views  
188 times used

Text to Speech synthesis tool for Basque

Keywords: text-to-speech synthesis · Basque

Language: Basque

Licence: ELG Elhuyar TTS Terms of Service  
*1 more version exists for this record*

ELG-compatible service



[www.elhuyar.eus](http://www.elhuyar.eus)



## Elhuyar Basque ASR

ASR-Elh-eus

Version: 1.0.0 (06/07/2021)

ELG-compatible service (service running on the provider's side)



### Cite resource

Elhuyar Fundazioa (2021, July 06). Elhuyar Basque ASR. Version 1.0.0. [Software (Tool/Service)]. Source: European Language Grid. <https://live.european-language-grid.eu/catalogue/tool-service/7361> 

### Cite all versions

Elhuyar Fundazioa (2021, July 06). Elhuyar Basque ASR. [Software (Tool/Service)]. Source: European Language Grid. <https://live.european-language-grid.eu/catalogue/cpid/5tggrLXdDux7QwNv3XidN/> 

Actions 

Overview

Download/Run


Try out

Code samples

No audio loaded - select one of the options below



Use audio from

 MICROPHONE

or from

 FILE

SUBMIT