# **UniDive WG3**

Subgroup - Multilingual Tool and Resource Documentation

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### **Task Overview**

### Task 1

- Assess the "discoverability" of NLP tools and resources
- Who can participate?
  - Everyone 🕖

### Task 2

- Analyse the NLP tool availability in the ELG catalogue
- Who can participate?
  - Excel or Tableau enthusiasts
  - Those with skills in data visualisation



# Task 1: Assessing the "discoverability" of NLP tools

- Choose your language(s) and NLP task(s) of interest
- Search for the relevant tools across a number of platforms
- Report on the discoverability of desired tool (Could you find easily it or not? What challenges?)
- Report on the metadata information available (was it sufficient and accurate?)
- What metadata do you recommend should be provided for a similar search?
- Is there a tool/ resource you are aware of that you can't find on these platforms?

\*\*(Activity will kick-off in Naples)



### E.g Search for Albanian Tools - ELRA Catalogue

owse Resources	Information		Cart total View ca	art Register			
NOLLEI DOSSE RESOURCE		albanian	Search	-			
Clear All Filter	5	1 Language Resource					
<ul> <li>Language</li> <li>Resource Type</li> </ul>		Order by: Resource Name A					
▶ Media Type		ECI/MCI (European Corpus Initiative/Multilingual Corpus I) Albanian Bulgarian Chinese Czech Danish Dutch; Flemish English Estonian French German Italian Japanese Latin Lithuanian Malay (macrolanguage) Modern Greek (1453-) Norwegian Portuguese Russian Scottish Gaelic; Gaelic Serbian Spanish; Castilian Swedish Turkish Uzbek					
Availability							
▶ Licence							
▶ Restrictions of Use		ID: ELRA-W0004					
▶ Linguality Type		ISLRN: 511-168-567-582-5					
Language Variation	ety	The European Corpus Initiative (ECI) was founded to oversee the acquisition		•			
		corpus, and supports existing and projected national and international efforts	to carefully design, collect	and publish			
Resource Typ	e:	large-scale multilingual written and spoken corpora. ECI has					
Corpus:		MEMBER	academic	commercial			
Lexical/Concept	ual: <b>ab</b>	Licence: Non Commercial Use - ELRA END USER	50.00 €	50.00€			
Tool/Service:	-						
Language Description:		Licence: Non Commercial Use - ELRA END USER	academic 50.00 €	commercial 50.00 €			

## E.g Search for Albanian Tools - CLARIN-SI Catalogue

N.SI repository / Search			
Q	Search	CLARIN.SI	
Selected Filters		Browse	
Exanguage : Albanian Correction Clear		> All of the Repository	
dvanced Search		My Account	
		Login	
Limit your search	Showing 1 through 5 out of 5 results	General Information	
Author		1 Deposit	
Autior		<b>75</b> Cite	
Subject -		C Submission Lifecycle	
Language (ISO)	Corpus CLARIN.SI Data & Tools	? FAQ	
	Twitter sentiment for 15 European languages	() About	
Туре	(Jožef Stefan Institute / 2016-02-23)	Help Desk	
corpus (3)	Author(s):		
lexicalConceptualResource (2)	Mozetič, Igor ; Grčar, Miha and Smailović, Jasmina <u>     S This item contains 16 files (49.38 MB).</u> Publicly Available () ()		

### E.g Search for Albanian Tools - ELG Catalogue



Catalogue

Search for services, tools, datasets, organizations...

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#### Clear all filters 🛞

Language resources & technologies

Tool/Service



#### 33 search results

Albanian 😣 🛛 Tool/Service 😣

### **Albanian Tagger**

A segmentation, morphological tagging and lemmatization models, using the Turku Neural Parser Pipeline. Form more information: Morphological Tagging and Lemmatization of Albanian: A Manually Annotated Corpus and Neural M

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Keywords: Albanian · Tagger

Language: Albanian

Licence: Apache License 2.0

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### E.g Search for Albanian Tools - Hugging Face

$\leftrightarrow$ $\rightarrow$ C $($ huggingface.co/models?search=all	panian 🖞 🖈 🛃 🕼 🥐 Relaunc				
Hugging Face Q Search models, dataset	s, users				
Tasks Libraries Datasets Languages Licenses Other	Models 9 albanian new Full-text search 11 Sort				
Q. Filter Tasks by name	<pre>     akdeniz27/mbert-base-albanian-cased-ner     Structure Token Classification + Updated Mar 22, 2023 + ± 17 + ♥ 1 </pre>				
Multimodal					
Feature Extraction 🦻 Text-to-Image	<pre>   plattenschieber/albanian_gheg </pre>				
Image-to-Text Base Image-to-Video	Updated Aug 10, 2021				
🙃 Text-to-Video 🖸 Visual Question Answering	Wushtrim/bert-base-multilingual-cased-finetuned-albanian-ner				
Document Question Answering	器 Token Classification 。 Updated Nov 4, 2023 。 生 1				
Sraph Machine Learning					
🔯 Image-to-3D	Gerti/distilbert-base-multilingual-cased-finetuned-sentiment-albanian ## Text Classification + Updated Jul 29, 2023 + 24				
Computer Vision					
Septh Estimation Berling Image Classification	tamshnoo/alpaca-2-7b-albanian				
Solution Detection Image Segmentation	Updated Nov 11, 2023				
Image-to-Image	😻 iamshnoo/alpaca-2-13b-albanian				
Unconditional Image Generation	Updated Nov 11, 2023				
Sa Video Classification					
Zero-Shot Image Classification	(1) iamshnoo/alpaca-2-70b-albanian Updated Nov 10, 2023				
🖏 Mask Generation					
# Zero-Shot Object Detection	Alimzhan/wav2vec2-large-xls-r-300m-albanian-colab				

# Task 1: Assessing the "discoverability" of NLP tools

### Process

- A template will be provided with prompt questions
- Additional input also desired

### Outcome

- An increased awareness and understanding of language technology platforms
- Insight into limitations of current schemas
- Honed research skills in searching for NLP tools/ resources
- Recommendations for improving discoverability of tools/ resources



# Task 2: Tool Availability Analysis

- Seeking volunteers with strong Excel/ Tableau skills
- Analysis required on ELG catalogue export similar to Kristina's report as starting point
- Prompts below can be the start of investigation let's see what else emerges:
  - 1. The tools that certain languages are missing (e.g. Irish doesn't have NER, Sentiment Analyser, etc)
  - 2. The multilingual tool types that are lacking across languages (e.g. NER is only available for X, Y, Z languages)
  - 3. Which languages tend to be left out of "multilingual" tools?

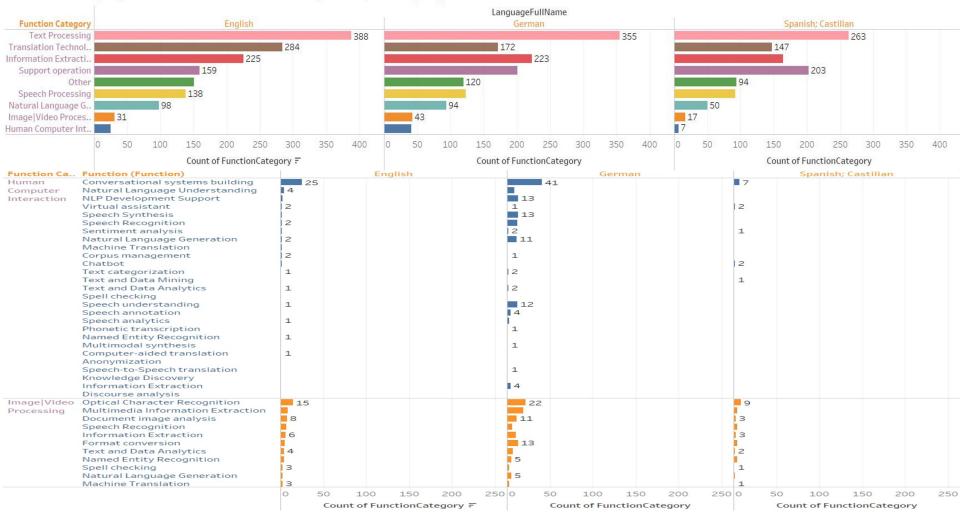


## **ELG Catalogue Export**

01  $\stackrel{*}{\checkmark}$   $\times$   $\checkmark$   $f_x$  Licences

	В	G	J	К	0	R				
1	Resource Name	Function	Input Media		Licences	Landing Page				
-		undefined	Types	Input Languages						
	CORDEX inflectional lookup data 1.0		1t	51	Creative Commons Attribution Non	• • • •				
	ANMOP	Text categorization   Text and Data	text	es		http://www.redilegra.com				
	Latvian grammar checker	Grammar checking	text	lv		https://www.tilde.lv/parei				
	COREA-coreferentieservice	Co-reference resolution		nl		http://hdl.handle.net/100				
	Collective Text to Speech	Text-to-Speech Synthesis   Speech	text	es pt	GNU General Public License v2.0	https://pypi.org/project/c				
	Lengoo Termbase	Terminology	text	de		https://www.lengoo.com/				
	extraTerm	Term extraction	text	en de		https://www.iailc.de/en/se				
386	Korp, Kielipankki version	Concordance search	text	ru es fr de en sv fi mdf myv sjd swh		https://korp.csc.fi				
387	Raudikko Analysis for Elasticsearch	Text and Data	text	fi	GNU Lesser General Public License	https://github.com/Evider				
388	ΜΙΟΡΙΑ	Annotation   Sentiment analysis	text	es   en		https://miopia.grupolys.or				
389	Across Translator Edition	Terminology	text	de		https://www.across.net/e				
390	Norma	Summarization   NLP Development				http://simple4all.org/proc				
391	StrokeAid	Speech Synthesis	text	hu		http://magyarbeszed.tmit				
392	Recognizer	Speech understanding	audio	lt	<b>Creative Commons Attribution 4.0</b>	https://xnratija-				
393	SpeCT - Speech Corpus Toolkit for Praat (v1.0.0)	Speech annotation   Text and Data			GNU Lesser General Public License	https://zenodo.org/record				
394	voiceovermaker.io	Speech Synthesis	text	no ko ja it id hu hi e  de fr fi fil en		https://voiceovermaker.io				
395	IRIS English-Irish Translation System	Machine Translation	text	ga en		http://server1.nlp.insight-				
396	۲"Г¤ni Company's Automatic Speech Recognition	Speech understanding   Multimedia	audio t	fi en fi en		https://www.aanicompany				
397	iTranslate Offline Translation	Machine Translation	text	vi tr th fa ru ko ja id he zh bs sq ar		https://itranslate.com/lan				

### Function Category COLLECTIONS broken down by Tools per Language



# Task 2: Tool Availability Analysis

**Expected Outcomes** 

- A better insight into current NLP tool availability
- A better insight into existing gaps and digital language inequality
- A basis for improved reporting on language support or tool availability status (visually/ written reports)



# Thank you for your attention!

**Questions?** 

