CLARIN-LV: Many Steps till Operation

Inguna Skadiņa, Ilze Auziņa, Roberts Darģis, Eduards Lasmanis and Arnis Voitkāns









CLARIN

VIENOTA VALODAS RESURSU UN TEHNOLOGIJU INFRASTRUKTŪRA



CLARIN ERIC

CLARIN-LV

 Preparatory phase (2008-2010): puting everything in place



2008-2011: Preparatory Phase. MoU signed.

 Construction phase: (2011-2015): building and populating with tools and resources



2016: Latvia joins CLARIN ERIC

Exploitation phase (2016 -):
 CLARIN in full service



2018-2022: Construction phase

Outline: Many Steps till Operation

- Centre and Repository
 - building
 - filling
 - certification
- Consortium
 - building
 - collaboration
 - strengthening collaboration with digital humanities community
- Teaching and training

CLARIN-LV







bout Participants

Repository

News

Publications

Contacts

About

CLARIN stands for "Common Language Resources and Technology Infrastructure". It is a research infrastructure that was initiated from the vision that all digital language resources and tools from all over Europe and beyond are accessible through a single sign-on online environment for the support of researchers in the humanities and social sciences.

In 2012 CLARIN ERIC was established and took up the mission to create and maintain an infrastructure to support the sharing, use and sustainability of language data and tools for research in the humanities and social sciences.

Currently CLARIN provides easy and sustainable access to digital language data (in written, spoken, or multimodal form) for scholars in the social sciences and humanities, and beyond. CLARIN also offers advanced tools to discover, explore, exploit, annotate, analyse or combine such data sets, wherever they are located. This is enabled through a networked federation of centres: language data repositories, service centres and knowledge centres, with single sign-on access for all members of the academic community in all participating countries. Tools and data from different centres are interoperable, so that data collections can be combined and tools from different sources can be chained to perform complex operations to support researchers in their work.

The CLARIN infrastructure is fully operational in many countries, and a large number of participating centres are offering access services to data, tools and expertise. At the same time, CLARIN continues to be constructed in some countries that joined more recently, and CLARIN's datasets and services are constantly updated and improved. On the services page we show the services accessible at this moment and we explain how and by whom the various services can be accessed.

CLARIN-LV organizes the 10th Conference Human Language Technologies - the Baltic Perspective

The Tenth International Conference "Human Language Technologies - the Baltic Perspective" will take place on October 6-7 at the University of Latvia. The aim of the conference is to provide a forum for the sharing of new ideas and recent advances in human language processing and to promote cooperation between the research communities of computer science, linguistics and digital humanities from the Baltic states and the rest of the world.

Conference program.





EIROPAS SAVIENĪBA Eiropas Reģionālās attīstības fonds

Activities of CLARIN Latvia are supported by project of the European Regional Development Fund Nr. 1.1.1.5/18/I/016 University of Latvia and institutes in the European Research Area - Excellency, activity, mobility, capacity

IEGULDĪJUMS TAVĀ NĀKOTNĒ

www.clarin.lv info@clarin.lv

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Repository



CLARIN DSpace

- After analysis of different options used by other CLARIN centres, CLARIN Dspace (formerly known as LINDAT Dspace) repository system was chosen.
- The main reasons for this choice were:
 - availability of installation resources and documentation
 - rather easy installation and documented
 - approval by many CLARIN centers
 - reliability
 - technical support

Core Trust Seal and B-centre certification





[Source: CoreTrustSeal Requirements 2020-22]

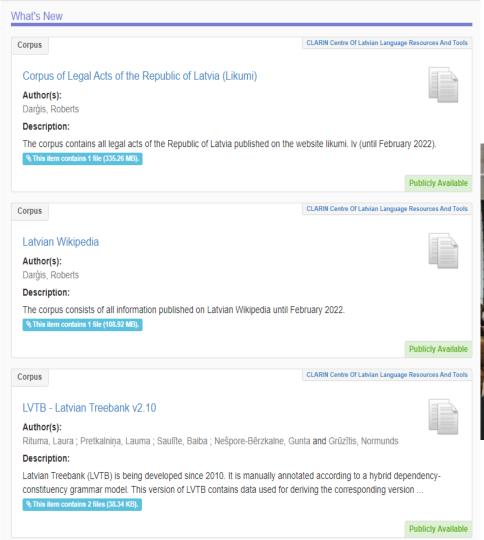
CoreTrustSeal self-assessment template

The CoreTrustSeal self-assessment includes 16 requirements (R1–R16) plus R0 providing contextual information on the repository. This template contains all requirements along with guidance for formulating self-assessment statements and gathering related evidence. Along with the self-assessment statements, the applicant must indicate a compliance level for R1–R16:

- 0. Not applicable
- 1. The repository has not considered this yet
- 2. The repository has a theoretical concept
- 3. The repository is in the implementation phase
- 4. The guideline has been fully implemented in the repository

The <u>CoreTrustSeal Trustworthy Data Repositories Requirements: Extended Guidance 2020–2022</u> document contains more information on e.g. missing evidence, understandability, non-English language documentation, sensitive/internal documentation, structure and length of responses, and further guidance for certain requirements. Please read it before starting!

CLARIN-LV repository



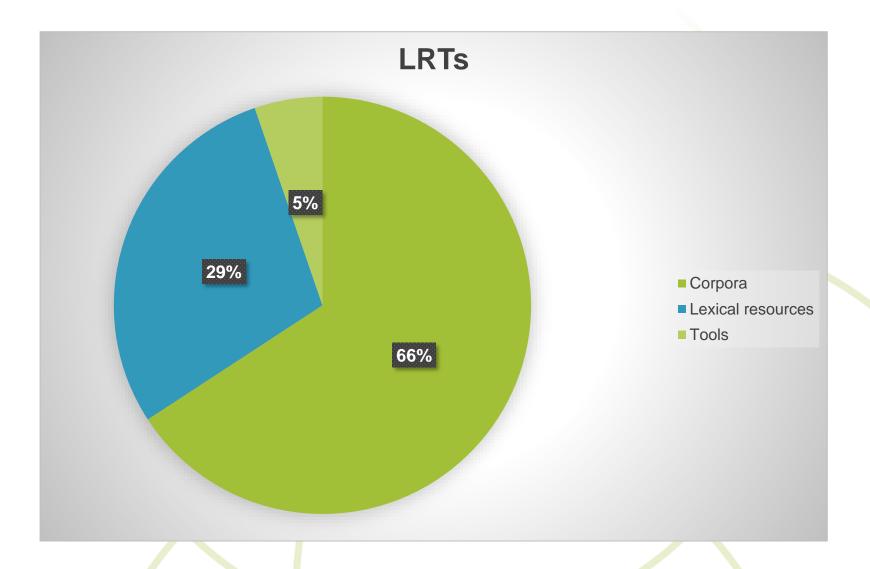
The repository was set up in March, 2020



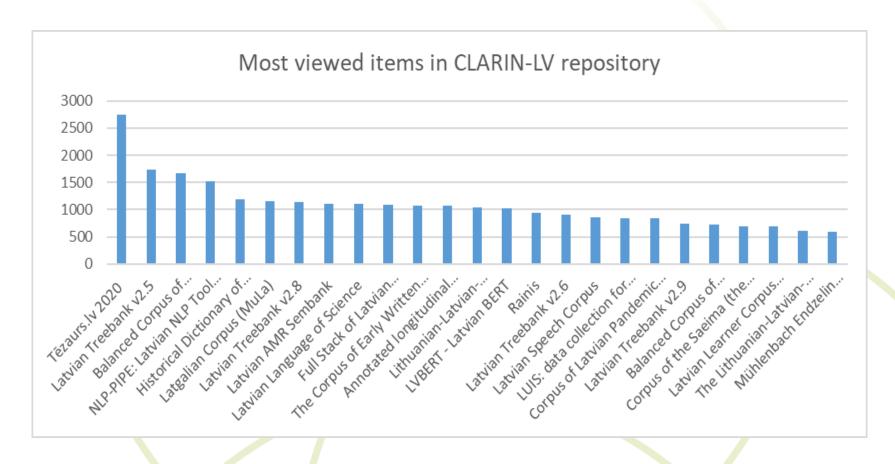
repository.clarin.lv

repository.clarin.lv 8

Language Resources and Tools in CLARIN-LV

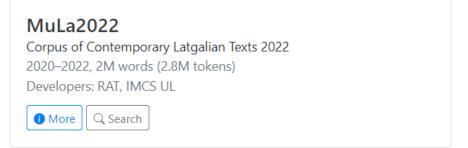


Top 25 most viewed language resources and tools in CLARIN-LV repository

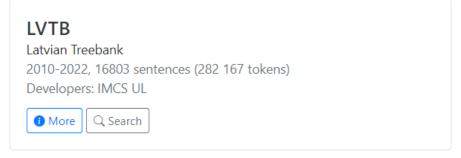


Corpora

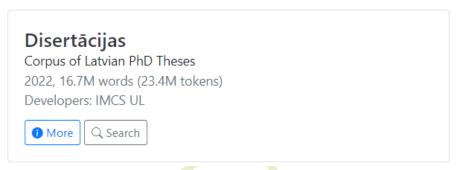
general (6) learner (2) literary (4) parliamentary (1) diahronic (1) specialised (12) representative (7) parallel (1) text (24) speech (5) morphology (22) syntax (3) semantics (1) error annotation (2) manually annotated (4) web (2)



Latvian Language Learner Corpus 2018–2021, 192k words (241k tokens) Developers: IMCS UL More Q Search



Barometrs Corpus of News Portal Comments 2011–2022, 26M comments (642M tokens) Developers: RSU, IMCS UL More Q Search



Parliament Data Corpus

Saeimas stenogrammas

Meklēšan:

Par vietni

Šī vietne ir izveidota, lai atvieglotu darbu žurnālistiem, politologiem un citiem, kas interesējas par Saeimas darbu un deputā 11. Saeimai ieskaitot) korpuss, kas ļauj meklēt gan vienlaicīgi visās Saeimas stenogrammās, gan arī konkrētās sēdēs, laika

Lai darbu atvieglotu, katrai konkordancei ir norādīts to teikušais deputāts, viņa dzimšanas gads, frakcija, kurā deputāts ir b parādīts plašāks konteksts.

Stenogrammas iegūtas no Saeima.lv

Daži meklējumu piemēri:

"no zāles"

Par - 77, pret un atturas - nav. Likumprojekts par steidzamu atzīts. (No zāles	dep. A.Bērziņš: "Veiksmī
u svētkiem piešķirt brīvdienu. Tāpēc komisijā tas netika atbalstīts. (No zāles	dep. Dz.Ābiķis: "Lauku si
4, pret un atturas - nav. Likumprojekts pirmajā lasījumā atbalstīts. (No zāles	dep. J.Ādamsons: "Uz G



Augusts Brigmanis (1952)

2014/10/02 kārtējā sēde

s dep. I.Čepāne: "Es neko	No zāles	kos. Pēc šīs sēdes tātad Nu, pareizi Čepānes kundze mani palaboja (
s dep. Dz.Ābiķis: "Dzersim	No zāles	im par atzīmējamu dienu. Tātad - vīrieši, atcerieties par sievietēm! (
es deputāti vīrieši: "Āāā!" 2	No zāles	umprojektā, bet es šo priekšlikumu neatbalstīšu, godātie vīrieši, jo (
s : "Ooo!") Šeit nav runa	No zāles	dienu. Un šeit nav runa par 23.novembri, kā mēs runājam (Aplausi.

ParlaMint



rlietu komisijas vārdā - deputāts Ojā...

arētu?" Zālē smiekli.) 1.priekšlikums.....

	dep. I.Čepāne: "Es neko neteicul"), ka tātad dalībniekiem paši Dziesm dep. Dz.Ābiķis: "Dzersim katru dienul")
No zāles	deputāti vīrieši: "Āāā!" Zālē smiekli.) es tiešām uzskatu: mums šo
No zāles	: "Ooo!") Šeit nav runa Es vēlreiz uzsveru: šeit nav runa, es atvai

aizver muti



Ingmārs Līdaka (1966) ZZS

2009/10/15 kārtējā sēde

.... Katrā valstī valsts Neatkarības diena ir svinamā... (Dep. V.Buzajeva starpsauciens no zāles.) **Aizver muti**!... Katrā valstī Neatkarības diena ir svinamā diena! Tātad - ko Kabanova kungs domāja ar 11

ParlaMint: UD-annotated comparable corpora



ParlaMint-LV 2.1 (Latvian parliament)			
Query NOUN, iobj, VERB, palīdzēt 6	18 (75.61 per million) (1)		
Page 1 of 31 Go Next	Last		
2016-06-16,ZariņšIvars	tirgu , un tieši mēs palīdzējām ar savu	kompetenci	. Tas pats ir ar gāzes tirgu , par kuru mums būs
2019-12-19,StepaņenkoJūlija	, kas atrisinās šo problēmu un palīdzēs tiem	cilvēkiem	, kas ir savākuši šos parakstus vairāk nekā 50
2016-12-15,ŠicsMārtiņš	mērķis ir palīdzēt arī tiem otrās vai trešās grupas	invalīdiem	, kuri var piestrādāt atbilstoši saglabātajām
2016-12-15,ĶirsisVilnis	šī riska kapitālista kompetence un spēja palīdzēt	produktam	nonākt globālajā tirgū . Primāri svarīgas ir šīs
2017-02-09,BiteInga	par kopīgu eksportu , lai palīdzētu Latvijas	uzņēmējiem	atrast noieta tirgus savai produkcijai Kanādā .
2020-10-15, Dombrovskis Vjačeslavs	to PVN samazinātā likme kā instruments var palīdzēt	nozarēm	, tā vairs nav nekāda svētā govs ko nekādā veidā
2020-10-15, Dombrovskis Vjačeslavs	uzskatīja , ka tas var palīdzēt augļu un dārzeņu	nozarei	palielināt apgrozījumu , samazināt ēnu ekonomiku
2020-10-15,Reizniece-OzolaDana	nodokli , mēs faktiski palīdzam mazāk turīgajiem	iedzīvotājiem	ı. Tas Latvijā ir aktuāli , jo , kā mēs zinām , mums ir
2020-10-15,LiepiņaLiene	, ka šīs izmaiņas ir ļoti būtiskas , lai veselai	virknei	uzņēmēju palīdzētu iznākt ārā no pelēkās zonas .
2020-10-15,StepaņenkoJūlija	saprast , vai tiešām šis samazinātais PVN palīdzēs	uzņēmējiem	. Tas bija galvenais jautājums ; mēs nerunājam
2020-10-15,DombravaJānis	stimulējošie pasākumi , kā mēs varam palīdzēt	sabiedrībai	pārbūvēt esošās automašīnas par videi
2020-09-10,ZariņšIvars r	o medijiem dzirdējuši ka no sākuma palīdzējām [PER:	Lukašenko], lai viņš varētu izrēķināties ar savu opozīciju .
2020-09-10,GobzemsAldis	bet izlietota! - tādā veidā , lai tas palīdzētu visai	sabiedrībai	un Latvijas konkurētspējai Latvijas spējai
2019-01-31,Ločmele-LuņovaRegīna	, ka tas varētu arī rūdīt raksturu un palīdzētu	vīrietim	kļūt vēl vīrišķīgākam , - mazlietiņ paciesties .
2019-01-31,ZariņšIvars	tribīnes esmu apsolījis , es palīdzēšu ekonomikas	ministram	, ja viņš vēlēsies tikt galā ar šo afēru . Arī tad , ja
2019-01-31,ZariņšIvars	jautājumi ir konkrēti , lai palīdzētu ekonomikas	ministram	saprast , kas tad viņam būtu jāpajautā saviem
2020-10-29,StepaņenkoJūlija	ļoti jāsteidzas sodīt cilvēkus , bet palīdzēt šiem	cilvēkiem	nu , nevajag steigties . Nu tāda ir loģika . Es
2020-10-28, Kariņš Arturs Krišjānis	, kuri ar savu piemēru un argumentāciju arī palīdz	sabiedrībai	izvairīties no slimības izplatības un faktiski
2020-10-28, Kariņš Arturs Krišjānis	ka valdības ekonomiskais stimuls var palīdzēt mūsu	ekonomikai	būt izturīgai šajos grūtajos apstākļos . Mēs
2020-10-28, Kariņš Arturs Krišjānis	bīstama , kā to vispār varētu ārstēt un kā palīdzēt	pacientiem	valdībā mēs pieņēmām lēmumu - un paldies , ka jūs

CQL query:

```
[pos="NOUN"
    & dep="iobj"
    &
dep_head_pos="VERB"
    & dep_head_lemma=
"palidzēt"]
```

Erjavec, T., Ogrodniczuk, M., ..., Dargis, R., ..., Krilavičius, T., et al. ParlaMint: Comparable Corpora of European Parliamentary Data. Proceedings of the CLARIN Annual Conference, 2021

https://www.clarin.eu/content/parlamint-towards-comparable-parliamentary-corpora



Lexical Resources

LexicalConceptualResource

CLARIN Centre Of Latvian Language Resources And Tools

Historical Dictionary of Latvian



(Latvian Language Institute of the University of Latvia / 2016-12-05)

Author(s):

Andronova, Everita ; Frīdenberga, Anna ; Siliņa-Piņķe, Renāte ; Trumpa, Anta and Vanags, Pēteris

% This item contains no files.

LexicalConceptualResource

CLARIN Centre Of Latvian Language Resources And Tools

Dictionary of Contemporary Latvian Language (MLVV)



(Latvian Language Institute of the University of Latvia; AiLab IMCS UL / 2019)

Author(s):

Jērāne, Santa; et al.

▶ show everyone

% This item contains 1 file (2.68 MB).

Publicly Available

LexicalConceptualResource

CLARIN Centre Of Latvian Language Resources And Tools

Language consultations: electronic database



(Latvian Language Agency / 2017)

Author(s):

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♦ This item contains no files.

LexicalConceptualResource

CLARIN Centre Of Latvian Language Resources And Tools

The Tezaurs.lv platform





Public interface

Editing interface

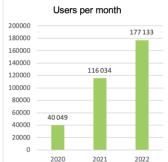
Data model

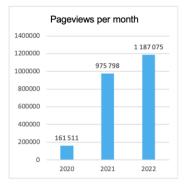
Database

Open data

Search

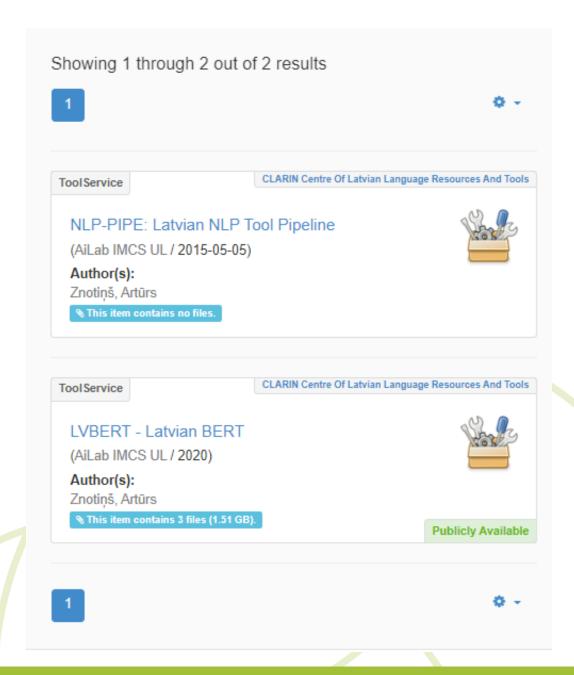






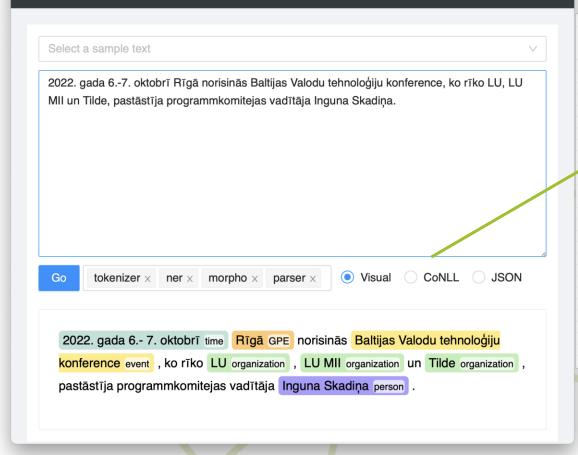
https://tezaurs.lv

Tools



Toolchain for Latvian Language Processing: NLP-PIPE

NLP-PIPE: Latvian NLP Pipeline as a Service



Used by: Korpuss.lv, National Library of Latvia, News agency LETA, IT students, etc.

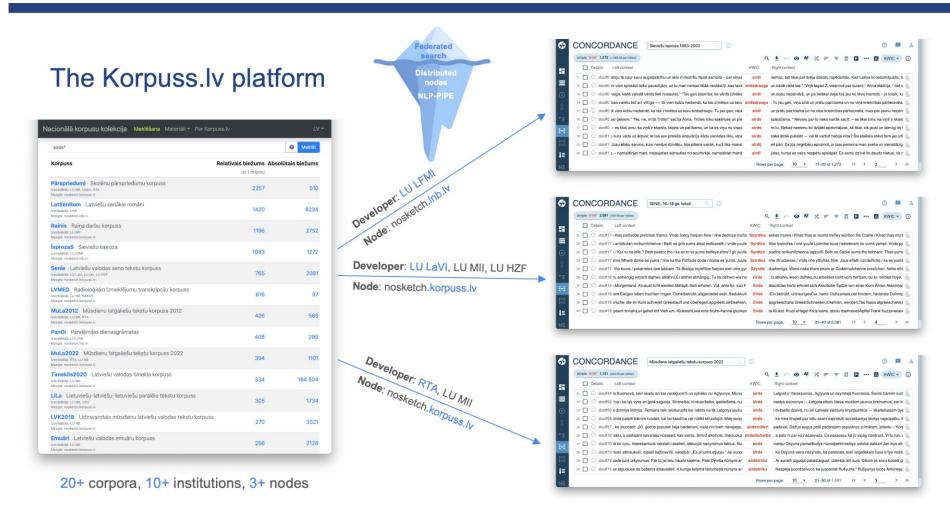
INDEX	FORM	LEMMA	UPOSTAG	XPOSTAG	FEATS	HEAD	DEPREI
#text=2	022. gada 6 7. oktob	rī Rīgā norisinās Ba	ıltijas Valodu	tehnoloģiju kon	ference , ko rīko	LU , L	U MII un
Tilde , p	oastāstīja programmko	omitejas vadītāja Ing	una Skadiņa				
1	2022.	2022.	ADJ	xo	NumType=Ord	2	amod
2	gada	gads	NOUN	ncmsg1	Case=GenlGer	3	nmod
3	6	6	NUM	xn	NumType=Car	5	amod
4	7.	7.	ADJ	xo	NumType=Ord	5	amod
5	oktobrī	oktobris	NOUN	ncmsl2	Case=LoclGen	7	obl
6	Rīgā	Rīga	PROPN	npfsl4	Case=LoclGen	7	obl
7	norisinās	norisināties	VERB	vmyip_330an	Evident=FhIMc	22	ccomp
8	Baltijas	Baltija	PROPN	npfsg4	Case=GenlGer	9	nmod
9	Valodu	valoda	NOUN	ncfpg4	Case=GenlGer	10	nmod
7	tehnoloģiju	tehnoloģija	NOUN	ncfpg4	Case=GenlGer	11	nmod
11	konference	konference	NOUN	ncfsn5	Case=NomlGe	7	nsubj
12	,	,	PUNCT	zc	_	14	punct
13	ko	kas	PRON	pr000an	Case=AcclPro	14	obj
14	rīko	rīkot	VERB	vmnipt230an	Evident=FhIMc	11	acl
15	LU	LU	PROPN	ур	Abbr=Yes	14	nsubj
16	,	,	PUNCT	zc	_	17	punct
17	LU	LU	PROPN	ур	Abbr=Yes	15	conj
18	MII	mii	Χ	у	Abbr=Yes	17	iobj
19	un	un	CCONJ	cc	_	20	cc
20	Tilde	tilde	NOUN	ncfsn5	Case=NomlGe	18	conj
21	,	,	PUNCT	zc	_	7	punct
22	pastāstīja	pastāstīt	VERB	vmnist330an	Evident=FhIMc	0	root
23	programmkomitejas	programmkomiteja	NOUN	ncfsg4	Case=GenlGer	24	nmod
24	vadītāja	vadītāja	NOUN	ncfsn4	Case=NomlGe	26	nmod
25	Inguna	Inguns	PROPN	npmsg1	Case=GenlGer	26	nmod
26	Skadiņa	Skadiņa	NOUN	ncfsn4	Case=NomlGe	22	nsubj
27		·	PUNCT	zs	_	22	punct

http://nlp.ailab.lv

Consortium and Collaboration with Digital Humanities



Collaboration with digital humanities



The project "Digital Resources for Humanities: Integration and Development" (VPP-IZM-DH-2020/1-0001)

Consortium (January, 2022)



Institute of Mathematics and Computer Science University of Latvia













User involvement



- The conference "Digital Latvian Language Resources and Tools in Common Research Infrastructure"
- The seminar "Tools and Resources for Digital Humanities Research"
- The practical seminar "Balanced Corpus of Modern Latvian "
- The practical seminar "Balanced Corpus of Modern Latvian"
- The practical seminar "How to use Latvian treebank in linguistic studies"
- The conference «Latvian language resources and tools for education»
- The conference «Human Language Technologies - the Baltic Perspective»

Workshop "How to Register Language Resources in the CLARIN Repository" (January, 2021)



Item submission

The Lithuanian-Latvian-Latgalian Dictionary

% Project URL	http://hipilatlit.ru.lv/eng/products/dictionary_info.html
☑ Demo URL	http://hipilatlit.ru.lv/dictionary/eng/dictionary.html
∰ Date issued	2013
№ Туре	lexicalConceptualResource
2 Publisher	RTA
Show full item record	
Resume Cancel	Share submission

SAFMORIL Knowledge Centre

- SAFMORIL CLARIN Knowledge Centre for Systems and Frameworks for Morphologically Rich Languages
- Collaboration between researchers and developers from the University of Helsinki, University of Tromsø, Vytautas Magnus University and the Institute of Mathematics and Computer Science (University of Latvia) in the area of computational morphology and its application to language processing.



Teaching activities



Teaching

Today most of teaching activities concentrate in **the University of Latvia** (Faculty of Humanities, Faculty of Education, Psychology and Art, and Faculty of Social Science)

- In 2017 new Computational Linguistics course for Master Students in English philology was started
- In Autumn, 2020 Computational Linguistics course started for Master Students in Baltic Philology
- In Autumn, 2020 *Digital Humanities and Social Sciences* for Master students in several study programmes
- In Autumn, 2022 Language Corpora in the Educational Process for the professional program for teachers
- Several corpus linguistics courses for Master and Doctoral students in English philology

CLARIN in the Classroom

- In lecture we introduce students with CLARIN research infrastructure, Virtual Language Observatory and resource families.
- We also highlight some LRTs that are more relevant to the research interests of students for particular year of studies.
- In the seminar students present their findings tool or resource they found in CLARIN VLO and that seemed interesting for her/him.
- We ask students explore other resources than simple corpus



Student's findings (Autumn, 2022)





ASV Online Toolbox





ELAN - Linguistic Annotator



Conclussion and next steps

Being among the smallest countries of CLARIN infrastructure and joining CLARIN only in 2016, has some positive and some negative consequences:

- On one hand, many administrative and technical issues were solved when we joined, thus we can use reliable and stable solutions developed by the consortium.
- On the other hand, being among the newest members of CLARIN, clearly revealed a gap in needs, understanding and readiness to serve the SSH community.

Conclussion and next steps

While the targeted project for setting up CLARIN-LV node will end in December, 2022, CLARIN-LV plans to continue activities through several language technology related projects:

- Recently started project "Research on Modern Latvian Language and Development of Language Technology" of the State Research Programme "Letonika – Fostering a Latvian and European Society" will continue supporting cooperation with digital humanities researchers, the development of new resources and their subsequent inclusion in the CLARIN-LV repository.
- Additional funding is also expected from the Latvia's Recovery and sustainability plan, which envisions activities for the development and implementation of high-level skills in language technology.
- New project proposal submitted for the the National Research Programme "Digital Resources of the Humanities"

Thank you!









INVESTING IN YOUR FUTURE