



EultDom2023 European Language Technology Domains 2023

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27-06-2023 META-FORUM 2023 — Digital Language Equality for a Multilingual Europe http://european-language-equality.eu

Objectives

- Map the usage of NLP/LT in various domains and report findings regarding the fields that make regular use of NLP/LT
- List domains that infrequently use NLP/LT or do not use it at all
- Output: a survey of mainstream usage of NLP in domains and languages and details about underrepresented ones
- This snapshot gives an **insight into how domains and NLP tasks are distributed** over the languages

Methodology

• Database:

- ACL Anthology Corpus Full Text
 - https://github.com/shauryr/ACL-anthology-corpus
 - Full-text and metadata of the ACL anthology
 - Total number of articles/posters (2010 2022): 49,466

• Languages:

- ELE languages with report update https://european-language-equality.eu/languages/
- 39 languages

List of domains:

- FORD (Fields of Research and Development classification) + ELE
- Health and Media excluded
- 46 domains

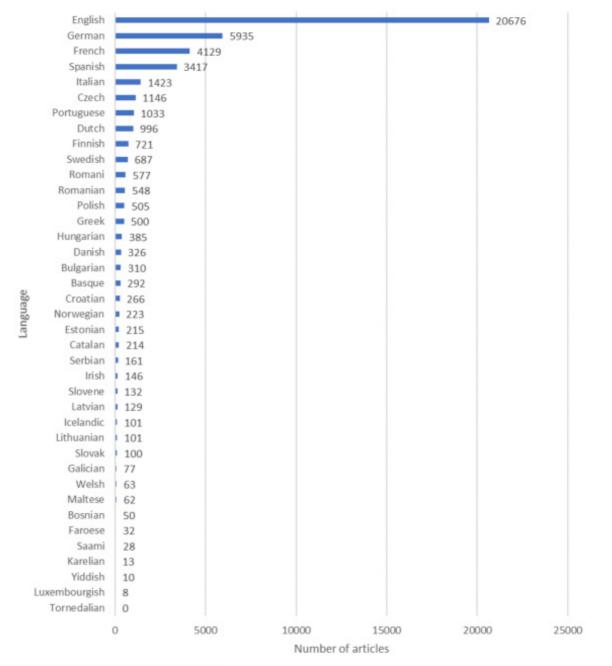
List of NLP tasks:

- The Oxford Handbook of Computational Linguistics + Wikipedia (Natural Language Processing) + IBM
- 51 NLP tasks

Dictionary-based approach

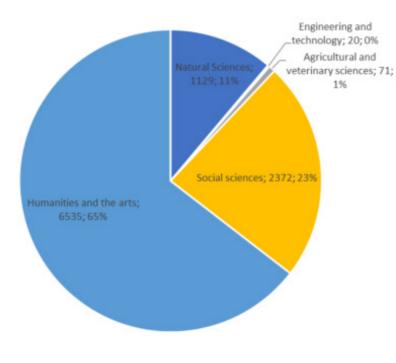


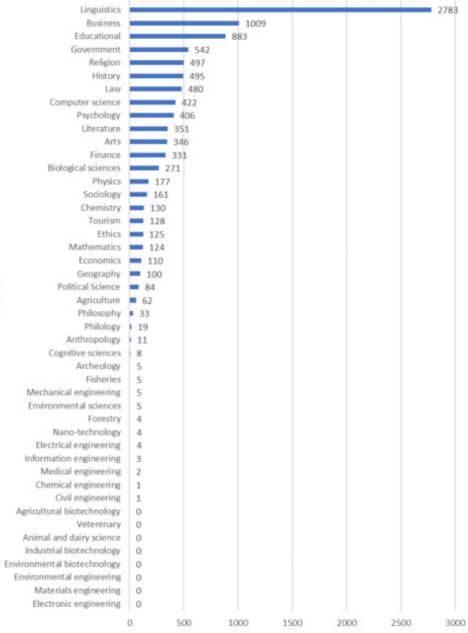
Languages Overview





Domains Overview





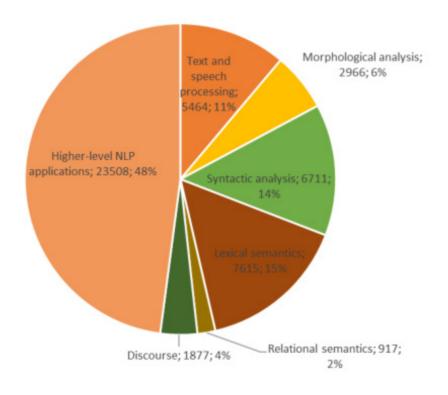
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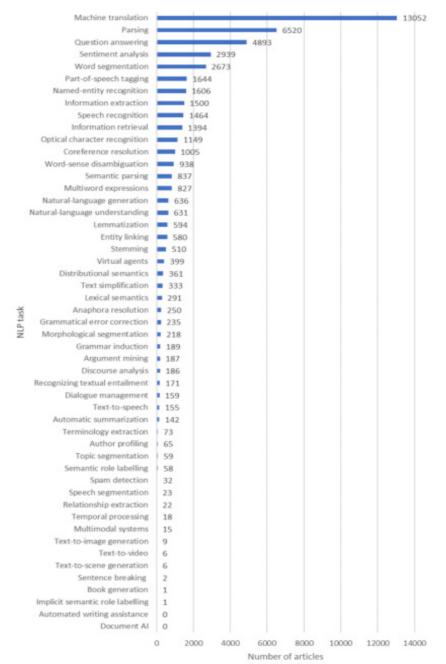
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European Language Equality

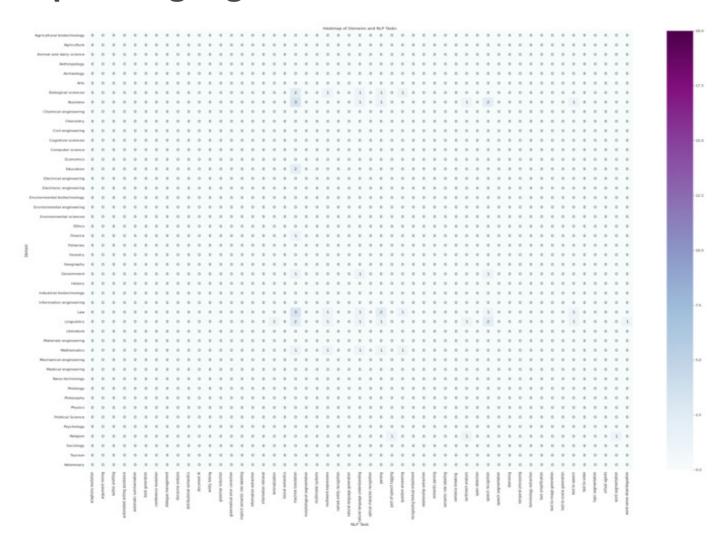
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NLP Tasks Overview





Results per Language

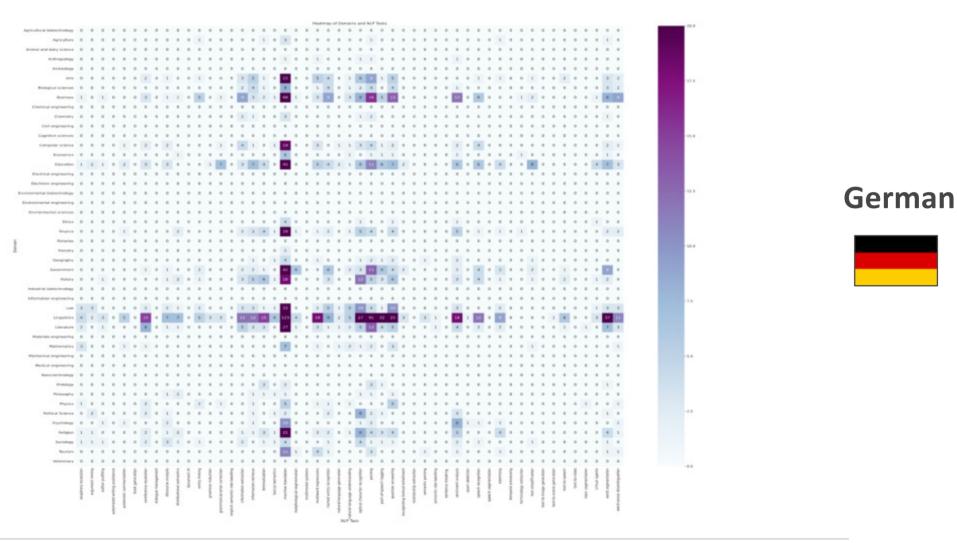


Maltese





Results per Language





Conclusions and Perspectives

- The EulTDom report presents:
 - An overall analysis that allows the identification of the infrequent languages, domains, and NLP tasks in the research work done by the LT community.
 - Language-specific analysis of how different domains use LT which can be used for the identification of research opportunities (i.e.: domains and NLP tasks well-developed for some languages but deficient in others).
- A complementary study can be conducted using research databases such as Web of Science and Scopus.



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Thank you!



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