

SWP

SS 2023

Authorship
Attribution

EvaCun 2023

References

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1 Authorship Attribution

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References

- identifying the author of a given document
- old but unsolved task
- highly relevant for ancient languages

Challenges

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References

- inconsistent and insufficient evaluation
- dataset diversity
- no agreed “best method”

Idea

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References

- 1** (re)implement (an) Authorship Attribution approach(es)
- 2** evaluate on established dataset
- 3** evaluate on a novel dataset containing ancient texts
- 4** explainability (?)

Goals

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References

- address an unsolved research question
- develop and refine a methodology
- esoteric methodology, rigorous evaluation

Pointers

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References

- overview: Tyo et al. 2022
- dataset, challenges: Kestemont et al. 2020
- common approaches, baselines, ideas: Altakrori et al. 2021
- how not to: Yamshchikov et al. 2022
- ideas: Uchendu et al. 2020

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- Sumerian and Akkadian: cuneiform writing system
- Sumerian: earliest recorded written language
- shared task with three subtasks
 - Akkadian (cuneiform) to English
 - Akkadian (transcribed) to English
 - Sumerian (transcribed) to English

Idea

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References

- take care of transcription
 - or let ByT5 (Xue et al. 2022) take care of it
- implement classical MT approach
- ensembling

Goals

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References

- win shared task

Goals

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References

- implement and refine established approach
- solve low-resource problems
- “classical NLP project”

Pointers

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References

- shared task:
<https://digitalpasts.github.io/EvaCUN/Home/>
- MT overview: Stahlberg 2020
- low-resource MT overview: Haddow et al. 2022
- promising model: Xue et al. 2022

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References

References

References

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-  Xue, Linting et al. (2022). "ByT5: Towards a Token-Free Future with Pre-trained Byte-to-Byte Models". In: *Transactions of the Association for Computational Linguistics* 10, pp. 291–306. DOI: 10.1162/tacl_a_00461. URL: <https://aclanthology.org/2022.tacl-1.17>.
-  Yamshchikov, Ivan et al. (Dec. 2022). "BERT in Plutarch's Shadows". In: *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*. Abu Dhabi, United Arab Emirates: Association for Computational Linguistics, pp. 6071–6080. URL: <https://aclanthology.org/2022.emnlp-main.407>.

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