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Project abbreviation: LT-BRIDGE

Project name: LT-BRIDGE presenting Maltese Language Technologies



Project coordinator: Claudia Borg

Project consortium: University of Malta, Dublin City University, DFKI, IDIAP

Funding: H2020-WIDESPREAD

Project duration: 3 years

Main key words: Maltese Language Technologies, Low resource language processing, Speech Technology, Text Processing.

Background of the research topic: Creating knowledge and expertise in the field of AI-based language technologies at the University of Malta, specifically in dealing with low-resource languages.

Goal of the project: LT-Bridge aims to strengthen the research and innovation capacity at the University of Malta with the aim of creating a Centre of Excellence in the field of AI-based language technologies.

Project abstract: The goal of the presentation is to give an overview of the work that is currently underway at the University of Malta by the Language Technology group. The research presented will include both Speech and Text processing tools at various stages of experimentation and development. Maltese is considered a low-resource language and often we make use of transfer learning techniques to harness the capabilities of larger models fine-tuned on Maltese. Various experimental approaches are taken in this regard.

Publications:

Mena, C., Gatt, A., DeMarco, A., Borg, C., van der Plas, L., Muscat, A., Padovani, I. (2020) MASRI-HEADSET: A Maltese Corpus for Speech Recognition, in the 12th edition of the Language Resources and Evaluation Conference (LREC'20).

Cardenas, R., Borg, C., and Zeman, D. (2019). CUNI–Malta system at SIGMORPHON 2019 shared task on morphological analysis and lemmatization in context: Operation-based word formation, in Proceedings of the 16th Workshop on Computational Research in Phonetics, Phonology, and Morphology, pages 104–112, Florence, Italy, August. Association for Computational Linguistics.

Zammit, A., Čéplö, S., van der Plas, L. and Borg, C. (2019) A Dependency Parser for Maltese - Comparing the impact of transfer learning from Romance and Semitic Languages in the 7th International Conference on Maltese Linguistics

Gatt, A., Tanti, M., Muscat, A., Paggio, P., Farrugia, R., Borg, C., Camilleri, K., Rosner, M. and van der Plas, L. (2018) Face2Text: Collecting an Annotated Image Description Corpus for the Generation of Rich Face Descriptions, in Proceedings of the 11th edition of the Language Resources and Evaluation Conference (LREC'18).

Borg, C. and Gatt, A. (2017) Morphological analysis for the Maltese language: The challenges of a hybrid system in Proceedings of the 3rd Arabic Natural Language Processing Workshop, Spain.