M³

NLG

MULTI-TASK
MULTI-LINGUAL
MULTI-MODAL

cost
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY

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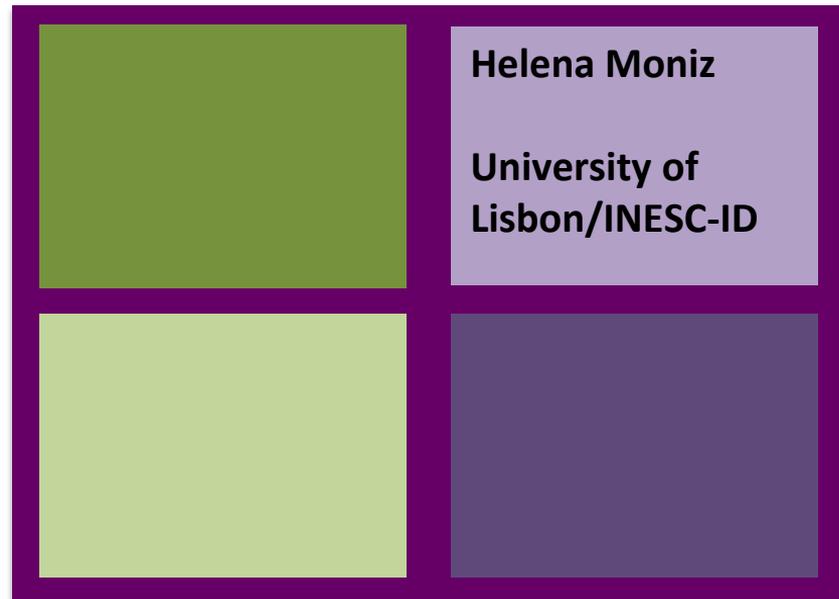
WG3: Dialogue, interaction and conversational language generation applications

Online meeting - September, 16th 2021

Outline

- **Overview on WG3**
- **Results/outcomes**
- **Planned activities**

Focus of WG3

This WG focuses on Human Computer Interaction(HCI) tasks in multilingual and multimodal scenarios applying LG models to distinct use cases, such as conversational agents, with 2 main directions:

- New **answer generation** techniques where the (human) agent will receive suggestions

- New techniques for **conversational quality estimation and sentiment analysis**

Main challenges for WG3

- **Scarcity** of multimodal and multilingual datasets for chat
- **Benchmarking** the models applied
- New **metrics** established for multilingual scenarios and how to adapt those for multilingual conversational dialogues

Heritage from the previous WG3 team:

- Plan a survey paper on NLG for dialogue including languages other than English.
- Identify relevant datasets and create a repository.
- Collect a multilingual dataset (disregarded by the team).

Results/outcomes:

- **Ramos, R., Pereira, P., Moniz, H., Carvalho J., and Martins, B. (2021) Retrieval Augmentation for Deep Neural Networks, IJCNN 2021**
- **Gosko, D., Znotins, A.,Skadina, I.,Gruzitis, N., Nespore-Berzkalne G. (2021) Domain Expert Platform for Goal-Oriented Dialog Collection, Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics (EACL): System Demonstrations.**
- **Survey on Emotion Recognition in conversations (to be submitted this month)**
- **Draft of a report on available multilingual datasets for conversational data (to be shared with the members)**

Planned activities:

- Participation in the cross-topic research roadmap with other members
- Conference and journal papers on sentiment analysis in conversational data and metrics to assess the quality of the dialogue
- Benchmarking? Participation in international challenges
- Responsible AI initiatives? We are working with 3 modalities with severe ethic aspects

Communication

- Slack channel (#wg3-dialogue-interaction-conversational-nlg)
- mailing list (wg3@sympa.multi3generation.eu)

Thank you!