

Informative and diverse emotional conversation generation with variational recurrent pointer-generator

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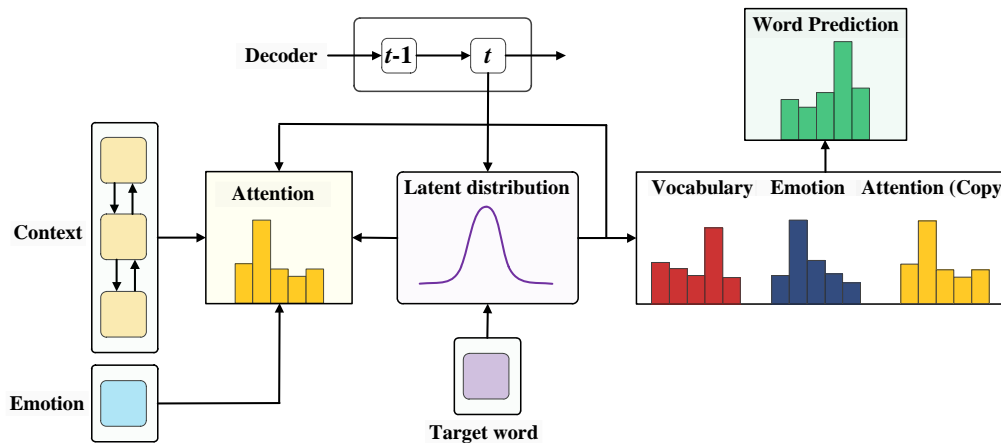
Problems & Ideas

▶ Controllable multi-turn emotional conversation generation

- ▶ **Task definition:** Given the conversation history and emotion category, generate emotion consistent response.
- ▶ **Limitations of existing methods:** Safe and dull emotional responses.

▶ Our ideas

- ▶ **Incorporate emotional trigger expressions:** Entity-related words and phrases provoking the desired emotion. 60.1% exists in context.

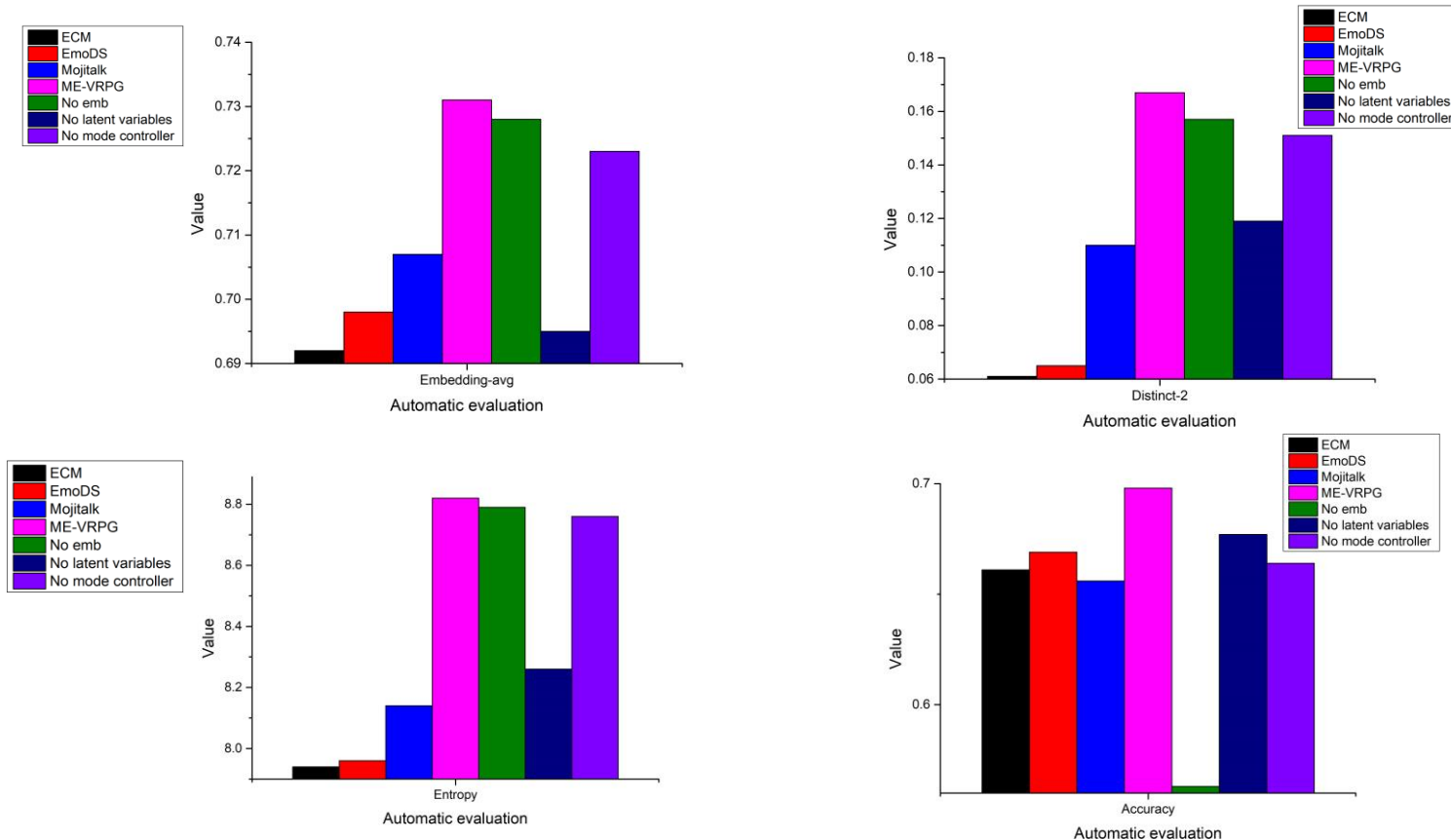


An overview of our proposed model

▶ Reproduce diverse emotional trigger expressions

- ▶ **Informativeness:** Propose an emotion-based Pointer-Generator.
- ▶ **Diversity:** Incorporate the sequential latent variable into copy.
- ▶ **Explicit emotional expression:** Estimate the generative probability over emotion words.

Main Contributions



The Results of automatic evaluation.

▶ Experiment automatic evaluation

- ▶ **Emotional trigger expressions:** improve informativeness and diversity.
- ▶ **Emotion embedding & mode controller:** promote explicit emotional expression.

▶ Experiment human evaluation (pairwise): ME-VRPG performs better than ECM, EmoDS and Mojtalk by 24.2%, 23.1% and 26.7%, respectively.