# **573 Project**

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### **Abstract**

This is the abstract part.

#### 1 Introduction

This is the introduction part.

## 2 Task description

We select the shared task (FETA challenge) by Albalak et al. (2022). It is a new benchmark for few-sample task transfer in open-domain dialogue. In this benchmark, we selected the FETA-Friends as our dataset from Chen and Choi (2016). It involves transcripts for all 10 seasons of the TV show (Friends).

The FETA-friends benchmark contains 7 tasks. We selected Emotion Recognition (Emory NLP) by Zahiri and Choi (2017) as our primary task and Personality Detection by Jiang et al. (2020) as our adaptation task.

For the primary task, the dataset contains utterances with one of the annotated emotions (eg. Neutral, Joyful, Powerful, Mad, Scared etc.). According to the dataset github <sup>1</sup>, the dataset fields include the utterance id, speaker name, transcript, tokens and annotated emotion. It is an utterance-level classification task. The evaluation is to calculate the micro-F1 and W-F1 scores of the prediction (classification output).

For the adaptation task, the dataset contains short conversations with annotated binary Big Five personality traits (Agreeableness, Conscientiousness, Extroversion, Openness, and Neuroticism). According to the dataset github <sup>2</sup>, each personality trait was annotated on a scale of -1, 0, 1. The annotation of each trait in a short conversation will

be summed up. The dataset contains scene id, character, AGR (Agreeableness), CON (Conscientiousness), EXT (Extroversion), OPN (Openness), NEU (Neuroticism), and text. It is a dialogue-level classification task. The evaluation is to calculate the accuracy of the prediction output.

For the key dimensions, the primary task has emotion as affect type, classification as recognition type, TV transcript as Genre, aspect-specific emotion as the target, text as modality, and English as language. For the adaptation task, it has personality type as affect type, aspect-specific personality detection as target, and all the other dimensions are the same as the primary task selected.

The FETA benchmark <sup>3</sup> provides access to data (train, test, dev), training and evaluation tool as a reference. The original author of dataset <sup>4</sup> also provides access to the same dataset.

#### 3 System Overview

This provides an overview for the systems.

### 4 Approach

This is the approach part.

### 5 Results

This presents the results of the model.

#### 6 Discussion

Discuss the results.

## 7 Ethical Considerations

This part discusses ethical considerations.

#### 8 Conclusions

This part presents the conclusion.

<sup>1</sup>https://github.com/emorynlp/
emotion-detection

<sup>2</sup>https://github.com/emorynlp/ personality-detection

 $<sup>^3</sup> https://github.com/alon-albalak/TLiDB/blob/\\ master/FETA\_README.md$ 

<sup>4</sup>https://github.com/emorynlp

#### References

Alon Albalak, Yi-Lin Tuan, Pegah Jandaghi, Connor Pryor, Luke Yoffe, Deepak Ramachandran, Lise Getoor, Jay Pujara, and William Yang Wang. 2022. FETA: A benchmark for few-sample task transfer in open-domain dialogue. In *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*, pages 10936–10953, Abu Dhabi, United Arab Emirates. Association for Computational Linguistics.

Yu-Hsin Chen and Jinho D Choi. 2016. Character identification on multiparty conversation: Identifying mentions of characters in tv shows. In *Proceedings of the 17th annual meeting of the special interest group on discourse and dialogue*, pages 90–100.

Hang Jiang, Xianzhe Zhang, and Jinho D Choi. 2020. Automatic text-based personality recognition on monologues and multiparty dialogues using attentive networks and contextual embeddings (student abstract). In *Proceedings of the AAAI conference on artificial intelligence*, volume 34, pages 13821–13822.

Sayyed M Zahiri and Jinho D Choi. 2017. Emotion detection on tv show transcripts with sequence-based convolutional neural networks. *arXiv preprint arXiv:1708.04299*.

## **Appendix A: Work Split**

work split in detail

#### **Appendix B: Packages Used in the Systems**

Link to the code repository on github:

https://github.com/kellycyy/

LING573-project

Off-the-shell tools used in code:

sample package how the package is used for what