General Session | General Session | GS-5 Language media processing

## [4A2-GS-6]Language media processing

座長:三田 雅人(サイバーエージェント) [現地]

Fri. Jun 9, 2023 12:00 PM - 1:40 PM Room A (Main hall)

1:20 PM - 1:40 PM

## [4A2-GS-6-05]Style-sensitive Sentence Vectors for Evaluating Similarity in Speech Style by Contrastive Learning

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Keywords:Speech Style, Sentence Embedding, Contrastive Learning, Speaker Classification
Since dialogue systems are required to keep its speech style consistency, evaluating the similarity of speech styles is an important task. However, the Japanese language has a wide variety of speech styles, and the vocabulary and word usage characteristics of each speech style is vast, making it difficult to evaluate the speech style. Therefore, we propose a speech style embedding model that generates a style-sensitive vector. The speech style embedding model is constructed by fine-tuning a pre-trained BERT model using contrastive learning. Sentence pairs with similar and different speech styles, which are necessary for contrastive learning, are automatically collected on a large scale using a sequence of sentences in web novels. We also analyze the grouping of speech styles and the characteristic vocabulary and word usage of each speech style using Ward hierarchical clustering method. Finally, we focus on the variation in the speech style of the same person depending on the situation, and analyze the variation in the style-sensitive vectors of the same character in the novel.