

Predicting Online Video Advertising Effects with Multimodal Deep Learning

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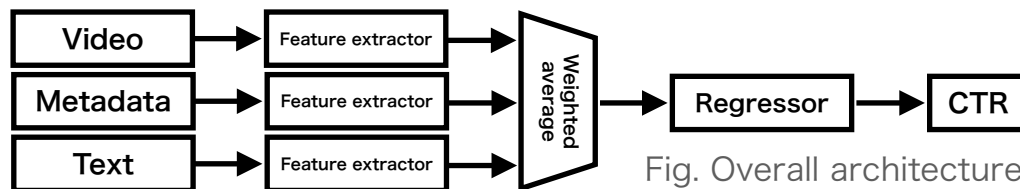
1. Motivation and Purpose

- Assist creating effective online video ads.
- Predict CTR of online video ads.

2. Data

- Online video ads on Facebook and Instagram, including video, metadata, text.

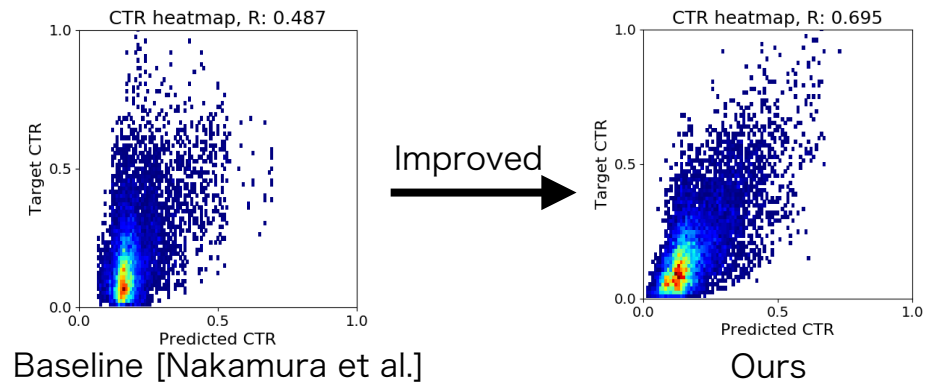
3. Method



- Normalize qualitative and quantitative metadata respectively in feature space.
- Input text data embedded by Doc2Vec.
- Insert batch normalization layers and apply dropout to suppress overfitting.

4. Results

- Achieved correlation coefficient of **0.695**.



Method	RMSE↓	R↑
Baseline [Nakamura et al.]	0.130	0.487
Ours(without improved extractor)	0.126	0.540
Ours(without text input)	0.109	0.684
Ours(without BN & Dropout)	0.121	0.598
Ours	0.107	0.695

5. Conclusion

- We proposed a method for predicting the CTR of online video ads, improving metadata processing, taking advantage of text and suppressing overfitting.