1 Ethical Declaration

In the development of the Hi-EF dataset, we place a strong emphasis on both copyright and ethical issues to ensure that the collection, processing, and sharing of data comply with relevant regulations, while also considering the potential societal impacts of our work. The dataset is sourced from TV show videos crawled from public platforms. To mitigate copyright risks and ensure the dataset's legality, we have taken several measures. First, we have drawn on the methodologies used in the construction of the DFEW[1], FERV39k[2], and MAFW[3] datasets and consulted with legal experts to ensure that our data collection and processing methods align with current copyright laws. Additionally, we employ a feature extraction method, converting the crawled video data into irreversible feature forms rather than using raw video content directly. This approach ensures that the dataset does not contain actual audio or video files but only retains feature data relevant to Emotion Forecasting, thereby avoiding the distribution of copyrighted material. Moreover, the dataset provides timestamps and public URLs to the videos, rather than including the original video files. This method allows us to provide the necessary reference information for Emotion Forecasting without distributing copyrighted material. Users can access the publicly available video content on their own through the provided timestamps and links, ensuring that the dataset itself does not involve copyright infringement. Despite these measures to mitigate copyright issues, we recognize that sourcing data from TV show videos on public platforms may still present some copyright challenges. Therefore, we will continue to monitor the dataset and adjust our strategies according to the latest developments in copyright law to ensure its legality.

At the same time,we fully recognize the potential ethical risks associated with Emotion Forecasting technology, particularly in terms of the societal impacts of emotion recognition and inference systems. As noted by reviewer LWqF, recent legislation such as the EU's AI Act has categorized certain emotion inference AI systems as "prohibited" technologies in specific contexts. This legislation underscores the importance of treating emotion recognition and prediction technologies with caution. While our research aims to provide tools for better understanding and predicting emotional changes to support emotion management, we also acknowledge the potential for negative applications, such as emotional or psychological manipulation. Therefore, we emphasize in our declaration that the development of Emotion Forecasting technology must be accompanied by strict ethical oversight and legal guidance to prevent misuse. Additionally, the fields of emotion recognition and forecasting are subject to inherent limitations, including the ambiguity in defining "true" emotions and the uncertainty in forecasting future emotional states. We acknowledge these challenges and have expanded our ethical declaration to discuss these issues comprehensively, recognizing that while our methods provide new tools for emotion management, they are not without ethical risks or technical limitations. We will continue to engage in discussions within the AI and affective computing communities to ensure that our work adheres to the latest best practices and regulatory standards.