

## ABSTRACT

The skin surface is composed of a network-like microstructure comprising wrinkles. Observing and analyzing the microstructure of the skin that changes with the skin condition and aging are simple, stable, and accurate evaluation methods for skin diagnosis. However, the skin surface includes various morphological and topological changes, depending on the individual or the degree of aging. It is difficult to accurately extract and analyze a skin microstructure including these changes. Therefore, we perform skin microstructure segmentation and aging analysis by using LSTM models. First, we propose a fusion UNet model to extract the skin microstructure. We compare and evaluate the segmentation performance by using an image processing method and deep learning models.