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강연제목: 웨어러블 디바이스를 활용한 동적 운동 및 호흡 패턴 추정 / Estimation of Dynamic Exercise Movements and Breathing Patterns Using Smartwatches and Earbuds

Abstract:

This study proposes a method to estimate exercise movements and breathing patterns using earbuds and smartwatches in dynamic exercise environments. The method utilizes a deep learning-based model that processes audio data from earbuds and IMU data from smartwatches to accurately analyze both movement and respiration. By providing feedback to users, it helps them maintain proper breathing patterns during exercise, thereby enhancing workout effectiveness and promoting better exercise habits. Future research will focus on refining the model and evaluating its performance in more complex and varied environments.

Brief Biosketch
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