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Sleep Tracking AI Application in Smart-Watches

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Abstract : This research paper aims to evaluate the effectiveness of sleep-tracking AI applications in smart-watches. It focuses on comparing the sleep analyses of two different smartwatch brands, Samsung and Fitbit, and measuring sleep at three different stages – REM (Rapid-Eye-Movement), NREM (Non-Rapid-Eye-Movement), and deep sleep. The methodology involves the participation of different users and analyzing their sleep data. The results reveal that although light sleep is the longest stage, deep sleep is higher than average in the participants. The study also suggests that light sleep is not uniform, and getting higher levels of deep sleep can prevent debilitating health conditions. Based on the findings, it is recommended that individuals should aim to achieve higher levels of deep sleep to maintain good health. Overall, this research contributes to the growing literature on the effectiveness of sleep-tracking AI applications and their potential to improve sleep quality.

Keywords : sleep tracking, lifestyle, accuracy, health, AI, AI features, ML
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