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sEMG-based deep learning framework for the automatic detection of knee abnormality

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Abstract

Knee abnormality is a vital issue that can be diagnosed utilizing a sEMG signal to detect muscle abnormalities. Manually analyzing EMG data is time-consuming and requires skilled doctors. Hence, this paper aims to provide an automated system for the diagnosis of knee abnormality. Here, sEMG signal acquired from four different lower limbs muscles of 22 volunteers with three activities: walking, sitting, and standing, of which 11 seem healthy,