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Title	A Smart Platform for Stroke Rehabilitation of the Upper Limb
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Abstract

This work aims to build a platform that may be used to improve and support physical therapy for stroke recovery patients by tracking muscle engagement in the upper limb. Since physical therapy can take a long time, patients often give up if they do not notice any improvement right away. Having a tool that can quickly deliver information on their performance will instill hope in both patients and caregivers. Using an electromyography sensor, we designed and built an Internet of Things (IoT) device for muscle contraction measurement in the upper limb. The signal is measured and sent to the mobile application. The mobile application was developed to acquire data from the IoT device via Bluetooth communication as well as to display data and collect additional information from users. A dashboard was also developed to display processed data so that doctors or caregivers could track the progress of patients. This IoT platform may be utilized to provide a higher-quality, affordable solution to stroke survivors, ensuring better health outcomes while also reducing healthcare personnel's workload.