عنوان مقاله:

Head and Neck Posture Monitoring SystemBased on IMU Sensors

محل انتشار:

هفتمین کنفرانس بین المللی پژوهش های کاربردی در علوم و مهندسی (سال: 1402)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Somia Molaei - *Software Engineering, Iran University of Industries & Mines*

Ali Ahmadi - *Civil Engineering, Iran University of Science and Tech*

Amirhossein Amadeh - *Independent Researcher*

خلاصه مقاله:

A head posture detection system based on three inertial sensors is provided in this study. Through a real-time monitor system that takes into account ۳ risk posture factors, the developed device was assessed. When the human subject's posture deviates from the predefined threshold, the suggested system gives feedback. This application may be able to prevent and correct the persistent incorrect posture that leads to neck discomfort, back pain, and other posture-related issues. On the Node MCU development board, every processing operation was carried out during the experiment. The testing findings demonstrate the suggested system's ability to successfully discern between good and proper head posture

کلمات کلیدی:

Posture, Head/Neck Posture, IMU Sensors, Monitoring, Posture Correction