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Number of Undergraduate Research Assistants Needed for Project: 2

Semesters: Fall 2017-Spring 2018

Description of Project: The effect of wearable posture sensor on the physical stress and cognitive performance of office work: Sitting and standing workstations. The purpose of the study is to evaluate the effect of wearable posture sensor on the physical stress and cognitive performance of office work. The small lightweight wearable sensor (Lumo Lift) gives a gentle vibration to remind workers to straighten up postures every time they slouch. However, the influence of this posture sensor on the joint angles of neck, trunk, and upper extremities, and cognitive performance of office work is still unknown. Thus, the scientific evidence is required to justify its use. This study will test following hypotheses: 1) Wearable posture sensor reduces the physical stress (reduced cumulative joint angles of neck, trunk, and upper extremities) of office workers 2) Having good upright postures (adjusted by the wearable sensor) increases the cognitive performance of the office work.