

Concussion and Vital Signs Monitoring Wearable Technology

Status: Available

Group Members:

Sponsor(s):

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Project Description

Project Background

Electroencephalography (EEG) is the measurement of electrical patterns of the brain. Quantitative EEG (qEEG) is the analysis of the digitized EEG. Recent literature indicates qEEG to be promising as a diagnostic assessment for mTBI and post-concussive symptoms. Studies also indicate other brain disorders and diseases such as autism, depression, and Alzheimer could be diagnosed at an early stage by analyzing the brain signals.

In Canada, Ice hockey had the highest reported cases of concussions or other TBIs among males aged 5 to 14 years. New research on the impact of traumatic brain injuries in young athletes shows that abnormal brainwaves and atrophy can persist for two years after a concussion.

A simple portable EEG to be installed inside sport he