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## In Moving Color: Motion Controlled Art Program

Computer hardware has greatly expanded from the standard keyboard and mouse. Touch screens seem to be taking over that field. Recently a new technology has been developed that offers an alternative to touch screens. Myo is a motion controlled armband that uses hand and arm gestures to control various Bluetooth devices. The objective of this research is to create a game or write a program that uses Myo's capabilities as its main control device. The primary focus of the game will be drawing and painting. Expectations include using Myo to draw on a blank canvas, control the utensil color, control the utensil size, as well as change the type of utensil. The research will investigate language compatability of Myo which is capable of using several languages such as Java, C++, Python, and many adaptations to other languages. This research project will experiment with multiple languages to see which one is most compatible for its purpose. Myo is still in development stages so as research is being conducted, more possibilities may open up. New gestures are being recorded which can be translated into tasks. Future research will experiment with what these developers have in store for Myo, and expand the project to test Myo's limits.

Keywords: Myo, Thalmic Labs, C++, Gesture Control, Java, Python, Drawing, Painting