Friday: A Micro-controlled Prosthesis

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Abstract: This research aims to provide a low cost micro-controlled prosthesis that can be used as an assistive technology method for people with physical disabilities. Thus, it is intended to allow its user to perform manual activities through various control modules, and also use it as a personal protective equipment in order to reduce possible occupational accidents. The prototype of this research was made from materials such as lactic polyacid and polyvinyl chloride, and has five control modules: Bluetooth, Wi-Fi, voice sensor, mirror glove and muscle sensor. The programming used was made from the C ++ language and applied to control the servo motors and their angles, according to some of the possible commands chosen. The project includes testing with potential users, obtaining the expected results in moving the prototype and forwarding the construction of new projects to aid the continuity of this research.

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