

Development of an Interactive Electrical Acupuncture Mannequin

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Abstract

This paper proposes a design for an interactive electrical acupuncture mannequin, which consists of three main parts: detecting sensors, electrical circuits, and a user interface. First, we use conductive rubber and polydimethylsiloxane to fabricate position sensors for detecting the piercing of needles and to mimic human skin texture. Second, a scanning circuit is constructed to inspect these sensors. Third, we develop a user interface and a disease database to record a number of different diseases and corresponding acupuncture therapies. Finally, the system is integrated as an interactive acupuncture mannequin that allows users to practice their acupuncture skills and therapies. The experimental results demonstrate the effectiveness of the system.