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Application of Mechatronics for Healthcare

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Abstract: *Advances in the healthcare technology have positioned bio- medical technology as a major driver in global knowledge- based economies. Fruitful human services mediation relies upon the capacity or experience of clinicians as well as the ampleness of restorative instruments and assistive gadgets. Moreover, the specialized guides and assistive gadgets for old or individuals with serious engine inability are getting more consideration because of our maturing society everywhere throughout the world, and they are broadly utilized in day by day life. As a result, medical mechatronics becomes an important emerging technology to improve healthcare. Medical mechatronics is the integration of technologies and knowledge from various domains [1], including biosignal sensing fusion, real-time clinical data analysis, electric and mechanical system design, assistive/ rehabilitation robot development, and machine/deep learning algorithms Albeit restorative mechatronics has ended up being fruitful in human services applications, there still remain troubles and difficulties to survive. For example, most previous assistive devices/robots were developed to provide patients with rehabilitation training in hospitals With the fast development of maturing populace, these assistive gadgets are required to have littler size and less expensive creation cost and be more secure so as to meet the prerequisite of in-house recovery [2]. Therefore, the medicinal mechatronic parts in these assistive gadgets/robots should be overhauled.*

Keywords: mechatronics, healthcare