Product Design and Development of Wearable Assistant Device

Authors : Hao-Jun Hong, Jung-Tang Huang

Abstract : The world is gradually becoming an aging society, and with the lack of laboring forces, this phenomenon is affecting the nation's economy growth. Although nursing centers are booming in recent years, the lack of medical resources are yet to be resolved, thus creating an innovative wearable medical device could be a vital solution. This research is focused on the design and development of a wearable device which obtains a more precise heart failure measurement than products on the market. The method used by the device is based on the sensor fusion and big data algorithm. From the test result, the modified structure of wearable device can significantly decrease the MA (Motion Artifact) and provide users a more cozy and accurate physical monitor experience.