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Title	Prototype of Wearable Device for Blood Pressure using Pulse Transit Time
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Abstract

At present, there is a continuous increase in the number of patients suffering from hypertension in Thailand. and resulted in higher mortality rates as well. with an increasing trend every year Some people with high blood pressure need medication and regular monitoring of their blood pressure to prevent further complications. Most of these are pressure gauges that require a cuff that is wrapped around a patient's upper arm, wrist, or thigh. which is not convenient to carry for patients who need to measure blood pressure regularly This research proposes a prototype of a wearable device for measuring blood pressure using Pulse Transit Time (PTT) by measuring the pulse between the wrist and the in dex finger of the other hand. and take the pulse movement time to calculate the blood pressure Based on the results of testing proto types of wearable devices for measuring pressure compared to commercially available pressure gauges. Of the five participants, the prototype of a wearable device for measuring pressure was approximately 85% accurate compared to commercially available pressure gauges. The prototype device can measure blood pressure in real time and is always portable.