

## **Measuring of systolic blood pressure based on heart rate images**

### **Abstract**

In this paper, we describe the method of noninvasive blood pressure (BP) measurement using electrocardiography (ECG) signal to measure arterial blood pressure. Here, we propose a continuous blood pressure monitoring method based on heart rates which are more suitable to monitor continuous blood pressure compared to traditional method. This study examines the relationships between arterial blood pressure and heart rate from 10 subjects that are normal. The experiment involved three sessions, which is rest, exercise and recovery from exercise. The end of this studies is can measured blood pressure continuously based on heart rate.

**Keywords** — Blood pressure, Electrocardiography (ECG), Heart Rate (HR)