

# **HEART RATE MONITORING FOR IoT-BASED ADRENALINE DRIVERS**

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## **ABSTRACT**

*The heart is an organ that is very important for humans because the heart is needed to pump blood throughout the body so that the body gets oxygen and nutrients needed for body metabolism. Heart rate or heart rate is an important indication in the health sector that is useful as an effective and fast evaluation material and serves as a tool to determine the health of a person's body. At this time, many people like or try rides that stimulate adrenaline, although riding rides that stimulate adrenaline is quite fun to do, it takes a healthy physical condition, especially heart conditions because it is quite influential when riding extreme rides. Therefore, before boarding the vehicle, it is necessary to have a physical health examination, especially the heart, in order to reduce the level of risk caused, especially heart attacks. Seeing the many risks, this study designed a device for monitoring heart rate (bpm) and oxygen in the body (spo2). In the manufacture of this tool using the MAX30100 sensor as a reading of bpm and spo2. Nodemcu esp8266 is a microcontroller that can receive input or output that functions as a data program reader that functions as a command giver. Nodemcu Esp8266 microcontroller so that it can be connected to the internet. Oled0.96 is an output that serves to display the output data from the sensor. The blynk application is an output that is displayed via a smartphone connected to the internet.*

**Keywords:** *Heart Rate, Pulse Oximeter, Nodemcu ESP 8266, IOT, Monitoring, extreme rides..*