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USING A GPS ENABLED BODY AREA NETWORK (BAN) BASED HEALTH TRACKER, THAT  
USES GSM, FOR MOUNTAINEERS IN NEPAL

**Abstract**

Nepal is a mountainous country with the highest peak of the world lying here, i.e. Mount Everest. Mountaineering is a major tourist attraction with direct economic contribution to the economy of the country. The lack of proper technology to track the mountaineers and their health status has resulted in bad consequence with increased death toll each year. Thus, to overcome the situation we have come up with an idea of using health tracker that uses cellular network for the data transmission. Unlike the existing health trackers, this device does not depend on the internet or mobile phone applications for data transmission; rather it can work in almost all the regions lying under the cellular network range. This device can measure the heart rate and the body temperature which are vital signs. The observed data along with the location will be sent as an SMS to the concerned persons as set by the user. We will be using electrical components like temperature sensing component, heart rate sensing component, location tracking unit, data transmission unit, power supply unit and the micro-controller.