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Smart Helmet using GSM GPS Technology

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Abstract: A motorcycle frequently called motorbike or two-wheelers, which is the most used than another form of automobiles because of its low price. But another side, this is the most unsafe automobile. The accident can happen for driving fast or drunk driving. Safety and security in vehicle traveling are a preeminent concern for all. With the rapid urbanization and staggering growth of transport networks like two-wheeler vehicles, safety on the roads and security on the bike has emerged as an inescapable priority for us. It has expanded the rate of accidents, which leads to several damages with loss of lives. In many circumstances, we cannot able to detect the accident's location. A helmet is a form of protecting gear worn to keep safe the head from injuries. More specifically, the helmet aids the skull in protecting the brain. A smart helmet can detect the accident's locations also save lives and makes two-wheeler driving safer from previously. This paper propounds a smart helmet system to avoid the accident. The system divides into three parts helmet circuit, automobile circuit, and mobile application. At first, the helmet circuit has IR and alcohol detection sensor. The automobile circuit has a 3-axis accelerometer, Bluetooth module, relay, and load sensor. The helmet circuit sends a signal to the automobile circuit to start if the helmet is wearied and no alcohol detects. Then the automobile circuit checks the status of the load to start. 3-axis accelerometer senses crash or hit. After detecting an accident mobile application sends the accident location automatically to police and emergency contact number via the database.

Keywords: Smart Helmet.

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