Helmet Detector

Abstract  
  
As the vehicular traffic continues to rise on account of India’s rapid growing middle class, the need for stricter regulations arises for public safety. The majority of new vehicles on Indian roads, both urban and rural are two wheelers – scooters and motorcycles. The riders of these vehicles are more susceptible to fatal accidents due to lack of in-built safety features as compared to their four-wheeled counterparts. This makes helmets a necessary safety measure that al riders must wear to prevent fatal injuries after an accident. Indian Government has realized this very issue and started stricter enforcement. The riders are required to wear helmets by law. Our project is a prototype that aids this cause. It detects if a rider is wearing a helmet and if the helmet is not found, it records the number plate of the vehicle. This makes it easier to catch motorcyclists that break the law, endangering their own life. A petty fine can save thousands of lives. Number plate detection can help find these law breakers and charge them with necessary fines. Hence our system will be very useful for ensuring public safety of riders and saving millions of lives each year.   
  
**Keywords :** Helmet Detection, Helmet, Public safety, Road safety, Traffic rules, Law, number plate detection, law enforcement, fatal injuries, accidents.