**Helmet Detector** 

**Group ID: F10-02** 

**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

public safety of riders and saving millions of lives each ensuring year.

Keywords: Helmet Detection, Helmet, Public safety, Road safety, Traffic rules, Law, number

plate detection, law enforcement, fatal injuries, accidents.