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Collision avoidance method for vehicles

System to prevent trucks sideswiping cyclists

Case Ref: Ceb-2974-14

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The problem

Collisions between vehicles and vulnerable road users, including cyclists and pedestrians and trucks sideswiping cyclists on the road, is a well known problem. Professor David Cebon and Dr Yabon Jia from the Department of Engineering at the University of Cambridge have developed a clever solution to mitigate against this problem.

The solution

The technology consists of an array of ultrasonic proximity sensors that can be fitted along the side of the vehicle. These sensors are then combined with software that is able to compute the trajectories of the truck and cyclist. Measuring trajectories enables the system to detect the collision triggers, anticipate a collision and actuate the truck braking system to avoid the collision.

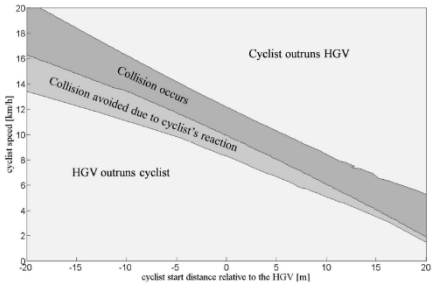
The system has been tested and provides significant benefits over current technologies in terms of its accuracy and effectiveness in detecting and preventing potential collisions. The system offers a 1.5m detection range and is a low cost system to implement.

Commercialisation

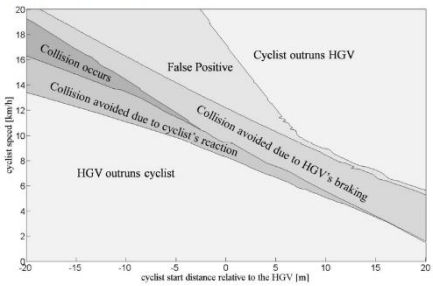
This technology has been published and is protected by patent application **GB2541354A**.

We are now looking for commercial partners interested in working with the University or independently to develop and commercialise this technology.

Without Collision Avoidance System:



With Collision Avoidance System:



Professor David Cebon

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