

ECHO EYE

Universal Innovation Design

3B9

Prof. Gareth J. Bennett
School of Engineering

Group 4 :
Caragh Conway, Diarmuid Deeney Curran,
Eva Toal, Finn O'Connor, Labiba Mansur,
Rian Geraghty-McDonnell,
Shane McDermott



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



What is Echo Eye?

Echo Eye keeps **cyclists aware of approaching vehicles** with **handlebar vibrations**, ensuring they stay focused on the road.

“Cyclists are uneasy from the proximity of cars so knowing if one is close would be helpful to react accordingly”

The small lightweight device can be easily attached to the rear end and handlebars of your bike , by using the built-in mount.



The Problem



Cyclists, those with **hearing impairments** or who **listen to music**, often **struggle to detect approaching vehicles**, leading to **safety concerns**.



How Does it Work?

Echo Eye detects when a vehicle approaches the rear of the bike and alerts the cyclist through vibrations on the handlebars, allowing them to stay focused on the road without distraction.



Our Mission

“To enhance cyclist safety by developing an intuitive alert system that detects approaching vehicles, providing timely warnings to cyclists without causing distractions. By increasing situational awareness and visibility on the road, we aim to empower cyclists with a safer, more confident riding experience.”