Preventing Hot Car Deaths by Monitoring CO2 and Temperature Levels to Alert Parents and Affect a Series of Life Saving Interventions in the Car

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Every summer, children and pets suffer needless deaths because they are unintentionally left in hot cars. Young children are placed in the back seat and are easily forgotten. My project provides a unique but simple solution to this tragic problem by using a CO2 sensor to detect a child left in a car and automatically alert the driver. If the concentration is rising, there must be a person or pet in the car. The goal of the Hot Car Death Prevention System is to detect if a child or pet is left in a dangerously hot car. When the car is turned off, the Hot Car Death Prevention System starts to track carbon dioxide concentration over time. If the concentration is increasing inside the car but not outside, there has to be a person or animal inside. The first stage of this project is to determine if CO2 detection is a good way to detect a child trapped in the car. The second stage is to design a device that will automatically text the owner of the car to let them know they left someone in the car. If the temperature is dangerous inside the car, the device sets an alarm off to let people know there is someone in danger. If the conditions are better outside the car than inside (not too hot or too cold), it automatically rolls down the windows. Through this engineering design project, a simple, effective device has been invented which can save lives.

Awards Won:

Third Award of $1,000