A Crash and an Airbag: Creating a Algorithm for an External Airbag System

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Cars companies today are investing millions on car safety techniques but little to none on what would happen if a car crash is inevitable. Car crashes currently cost $1 trillion per year in the US alone. This system tries to not only reduce the death toll of car crashes but also the economic toll by creating the concept of an external airbag system. There were four algorithms created over time for the external airbag system. For each of the four algorithms, multiple trials were run and data was collected for each. The trial in which the algorithm thought that the external airbag system should be deployed was collected. The fourth algorithm was most successful as it found when the crash would happen given the circumstances and found out when to deploy the airbag around the car to protect it given the variables like obstacle speed/distance. The applications of this project are massive. Road accidents are one of the top ten leading causes of death around the world and if this external airbag system is implemented in every car, the economic toll and death toll of car crashes would greatly reduce. This system doesn't try to prevent a car crash but gives an immediate and surefire way of completely resolving the issue of a car crash. More redundancy needs to be put in place in case car accident prevention techniques fail. The external airbag systems provide this redundancy. External airbag systems are the future of car safety techniques.

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