

**ACCIDENT PREDICTION ANALYZER
A CENTRALISED DATABASE AND A PREDICTION
MODEL FOR FATAL ROAD ACCIDENTS IN SRI LANKA**

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Abstract

Fatal road accidents have become one of the grave problems faced by the public not only in Sri Lanka, but around the world. The ignorance about the problem and not following enough safety methods have caused the drastic increase of deaths and injuries in the past couple of years in the island. With the number of deaths occurring per day in the island due to fatalities have increased it came to attention what is causing the increase.

The project is aiming identify and analyze factors causing the drastic increase of fatal road accidents and the limitations faced by the Department of Police and to provide an IT solution to the department to overcome the obstacles and ensure road safety.

The findings in the problem domain were evaluated through exiting literature and further investigated through direct inputs from officers, interviews and questionnaires distributed among officers.

The results highlight the need of an IT solution to support the police authorities in recognizing patterns in fatal road accidents in order to provide guidance in decision making and impose laws to ensure road safety.

Accident prediction analyzer is a web application to be only used within Sri Lanka Police Department which will be a change in direction of the manual processes currently followed. The solution will work as a data repository, dashboard and a prediction analysis component regarding fatal road accidents.

The solution was evaluated based on the feedback of users of the application and IT experts to establish the validity and the success of the solution and was recommended to address the recognized problem and will provided guidance in ensuring road safety.