**Accident Severity Prediction**

1. **Introduction**
   1. **Background**

Safety is always everyone priority, whenever and wherever they are, especially on the road. However as stated in a well-known Murphy’s Law: “Anything that can go wrong will go wrong”, traveling on the road is not without danger, since it could go wrong very quickly. No matter how fast the driver’s reflex or how experinced the driver is, without proper warning, fatal accident still could occur. It would be nice if there are some system that inform the driver about the danger present along the way during particular road condition. It will be very useful when the driver is unfamiliar with the local road condition. Such system will definitely reduce the traffic accident because with the risk information available, the driver will drive more carefully when the road condition become dangerous according to this information system. This system will definitely be useful for government to improve the safety of the road. Beside that, most vehicle’s GPS system manufacturers will be interested in a system that could analize and predict accident risk on the road because such system could be their useful and attractive selling point of their products.

* 1. **Problem**

Data to represent road condition that lead to accident is needed for accident severity analysis and prediction. These data could be the type of road where the accident takes place, the road condition during the accident, the weather, the light condition, the driver condition, etc. From these data, a model could be built to predict the severity of accident if it occurs on that type of road in all road, and driver conditions.