

## Applied Artificial Intelligence Project -3

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**Domain:** Car Accident Mitigation System ( CAMS)

CAMS is a bayesian decision network designed using NETICA that is able to predict probability of an car accident and use it to decide how much money needs to be invested. It considers various causes of accidents and explores them in depth. Some of the factors that it considers include experience levels, intoxication, speeding, distracted driving, weather conditions, road conditions, other physiological conditions, car defects etc.

It combines 24 nature nodes, 1 decision and 2 utility nodes to arrive at the probability of car accidents, and the money that needs to be spent in rectifying this issue. It takes into account the feeling of safety and happiness that the citizens of the locality feel with respect to the likelihood of accidents and the taxpayer's money spent. I have assigned various 'weights' and probabilities on the effects of the events on the intermediary variables.

Future work can include effects of various types of intoxications, other types of distractions ( calling, texting etc.), different types of weather and road conditions and effects of prior different driving experience in other countries.

### How To:

1. Open the "CarAccidents2.neta" or the "CarAccidents2.dne" file on Netica.
2. Compile it.
3. Play with the probabilities.

## Sample Test Case:

