Thesis topic

"Prediction of the accidents by data enrichment of the Estonian rescue board with public resources'

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The Estonian Rescue Board is dealing with various accidents both social and environmental that happen on the Estonian territory. Their goal is to prevent accidents, save lives and property, keep environment safe. Moreover, their strategic plan is to reduce the statistics of accidents by improving in numerous aspects. Planning of the rescue car divisions, creating an effective network of volunteers, reduce response times are just a few to name.

In order to meet the set goals, the Estonian rescue board has collected data regarding various aspects of its work routine. The dataset has many different challenges; a dedicated student who choses to work on this topic has an opportunity to help the Rescue board via the data analysis. Moreover, the suggested topic can be adjusted and changed according to the student preferences. The Estonian Rescue Board is willing to help and consult the student on a regular basis together with a supervisor from University of Tartu.

One of the suggested topics is "Prediction of the accidents by data enrichment of the Estonian rescue board with public resources". The goal is to explore the happened accidents not only with the respect to the provided data, but also by looking on other factors that can be collected from public resources. For example, a student could explore the associations with the information about the public events (festivals, celebrations and other places where alcohol is available), traffic road construction works, age of the buildings (potential fires), weather, demographical data, etc. The output of the work would be the model or set of models for different types of accidents.

More information about the strategic goals from the Rescue Board can be found here:

 $\label{lem:http://www.paasteamet.ee/dotAsset/0e0aa3b2-c02a-4f1f-a838-f73d184c4156.pdf$