



Bachelor-/Master-thesis

Implementing a machine learning approach to analyze emerging risks in food safety



Motivation

Food safety is an important topic that touches every one of us every day. But what risks are there in our food in the first place and how can we recognize them? That's not always easy to answer, especially when you look at it globally. There is an infinite amount of information in a wide variety of languages, so it's not easy to keep track of it all and track down the crucial signals. In order to bring safe food into circulation, it is therefore essential to identify risks before they become a problem.

Goals

In this thesis, existing data sets from the SGS laboratories and the SGS DIGICOMPLY platform on the topic of "Early risk detection in food safety" will be analyzed using current machine learning (ML) techniques. This includes designing an ML pipeline to preprocess the data and test different ML techniques, such as artificial neural networks. Students are expected to have knowledge of programming in Python, and ideally some knowledge of ML, but this can be acquired in advance of the work. The required depth as well as the scope of the analyses and evaluations will be determined in consultation with the supervisors depending on the final goal (Bachelor or Master).

We offer

- Work in an environment of innovative research
- Opportunity for hands-on work related to machine learning
- Excellent working environment and intensive supervision

Contact

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