**Leaflets three, let it be?**

**Introduction**

Mushroom edibility is determined by lots of different attributes. Conducting a poison test every time before eating is not realistic. Therefore, a method, which is able to judge the edibility by looking at its color, shape, habitat etc., is really essential. A classification model is conducted in this report to develop a way of differentiating edible and poisonous mushroom. The dataset includes descriptions of hypothetical samples corresponding to 23 species of gilled mushrooms in the Agaricus and Lepiota Family. It contains 8124 instances, with missing values in some attributes. Since it's categorical data, a context-based similarity measure that learns distances between the values of categorical attributes was employed.