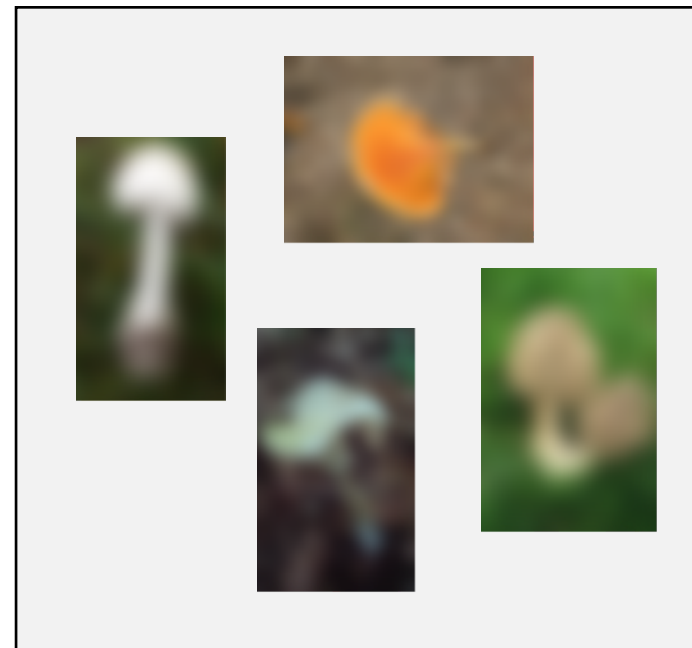


1.

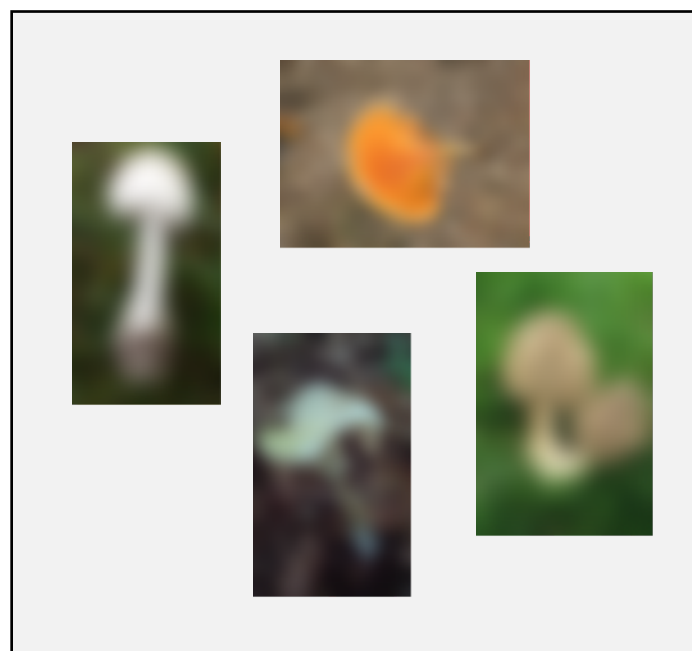
Database with Mushroom Images



The artificial intelligence of "Forestly" is a computer system that tries to learn patterns from a large amount of data by means of machine learning. Therefore, a database of many mushroom images is necessary for the identification of mushroom species.

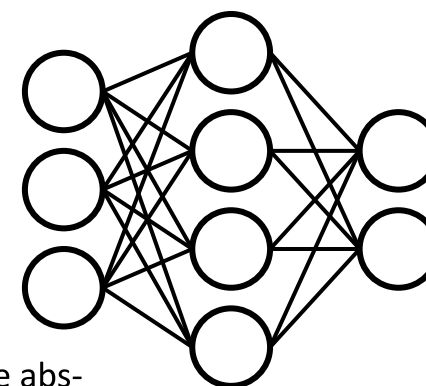
2.

Database with Mushroom Images



train

Model



simple abstract patterns, e.g., lines or simple shapes

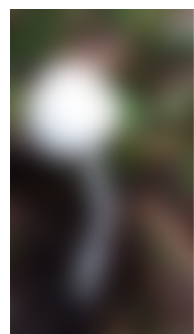
more complex patterns, e.g., lamellae, shape of cap etc.

high-level patterns, e.g., bigger parts of a mushroom

With this database, a digital model is created that can be used to classify new images. The model is built up in different layers. The first layer, for example, recognizes rather abstract features such as lines or simple shapes in images. Later layers then recognize increasingly complex patterns that are composed of the simpler lines and shapes—for example, whether the cap is spherical or funnel-shaped, or whether the mushroom has lamellae or tubes underneath the cap. There are many layers until the system finally decides on a particular mushroom.

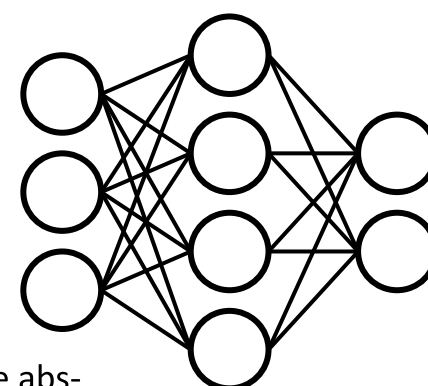
3.

Test Image



Input Image

Model



simple abstract patterns, e.g., lines or simple shapes

more complex patterns, e.g., lamellae, shape of cap etc.

Model Output

Result

Here the system reports its result and indicates how certain the result is.

When a new image is entered, the AI outputs a certain result based on the model, and indicated how confident it is with its prediction.