Fact Sheet - Artificial Intelligence - Tools

Using Vittascience to train a model

Presentation of the tool

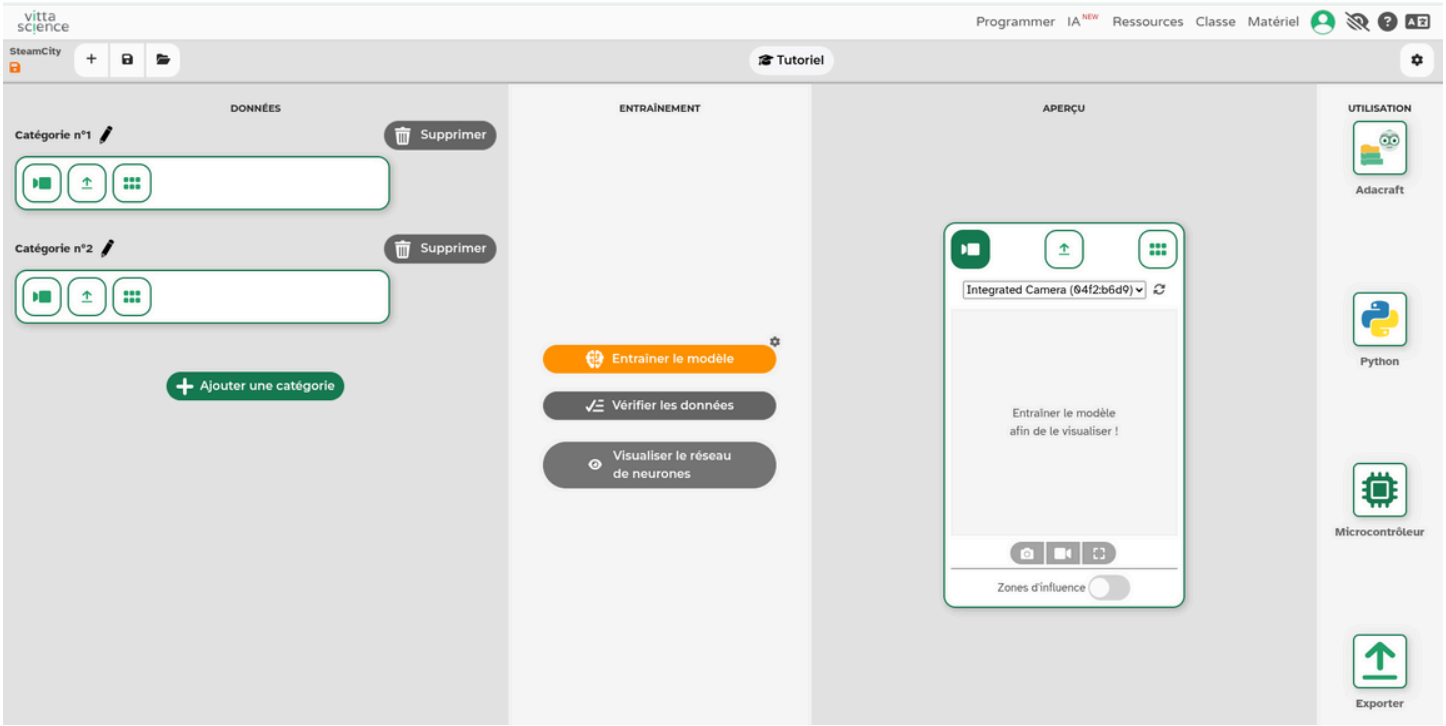
Vittascience – AI Images is an online platform that allows you to easily train an artificial intelligence model using photographs captured live via a webcam. The principle is based on supervised learning: the user creates categories, provides visual examples for each, then trains a model capable of making predictions in real time. This tool is designed for education and requires no installation. It works directly from a web browser.

Access to the tool: 👉 https://fr.vittascience.com/ia/images.php?localId=loc637b12c40c27a8

Main Features

The Vittascience – AI Images interface offers a step-by-step approach to machine learning through ten guided steps. The user begins by creating at least two categories. Each category represents a class of objects or situations that the model will need to learn to recognize. These categories are manually named.

Once the categories have been created, it is possible to add visual data to each of them. To do this, the user places an object in front of the webcam and captures a series of images (approximately 10 to 15 photos per category), varying the angles, distances and positions to enrich the model's learning.



Once enough images are collected, the “Train Model” button becomes active. One click starts the training process. Within seconds, the model analyzes the images and builds an internal representation of each category.

Once training is complete, the tool allows you to test the model in real time. By showing an object to the camera, the user receives a prediction expressed as a percentage. This indicates the AI's confidence in whether the object belongs to one of the created categories.

An additional feature – zones of influence – allows you to visualize the parts of the image that had the most influence on the model's decision. This provides a concrete entry point into understanding visual interpretation by an AI.

Possible uses

This tool is particularly suitable for:

- Introduce the concepts of supervised machine learning to a school audience;
- Understand the role of training data in building a model;
- Observe the limits, inaccuracies and biases of an automated model;
- Conduct simple experiments around the classification of visual objects.

System requirements

- A computer equipped with a working webcam;
- Internet access via a web browser (Chrome, Firefox, Edge, etc.);
- No account, download or installation is required.