

AI Curriculum

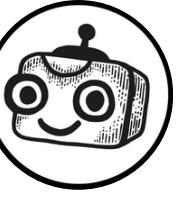
Teaching Material for the AI Curriculum for Elementary and Secondary Schools
Computer Science at Secondary Schools

02

Machine Learning Deck

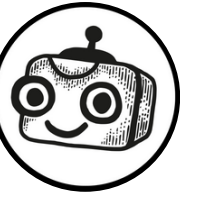
Supervised Learning





Think back to the previous lesson.

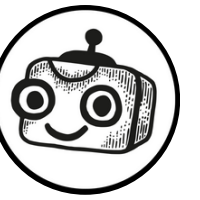
Which family did the little foundling belong to?



Download the alien images:



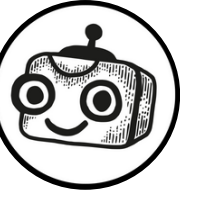
https://bit.ly/aliens_01



Open Teachable Machine in your browser:

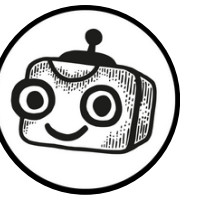


teachablemachine.withgoogle.com



So, how did it turn out?

Which of the foundlings were more like Fluffs and which were more like Earls – and why?



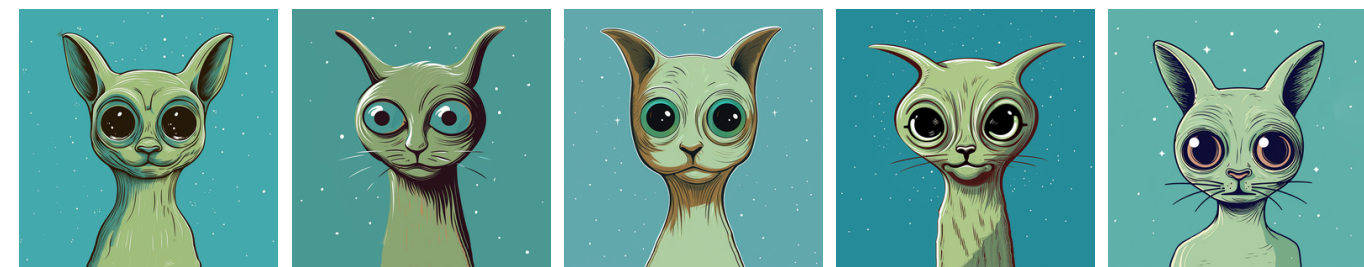
Supervised Learning

Machines can learn from examples, but they need people to tell them what's what. In this sense, humans act as teachers for artificial intelligence. That's where the name "supervised learning" comes from.

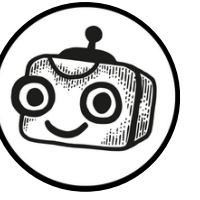
When we train an AI program (called a machine learning model), we first have to tell it what each thing is. We do this by organizing the data (in our case, images of aliens) into labeled classes or categories.



Fluffs

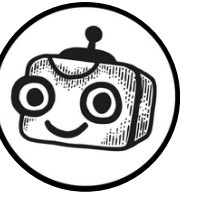


Earls



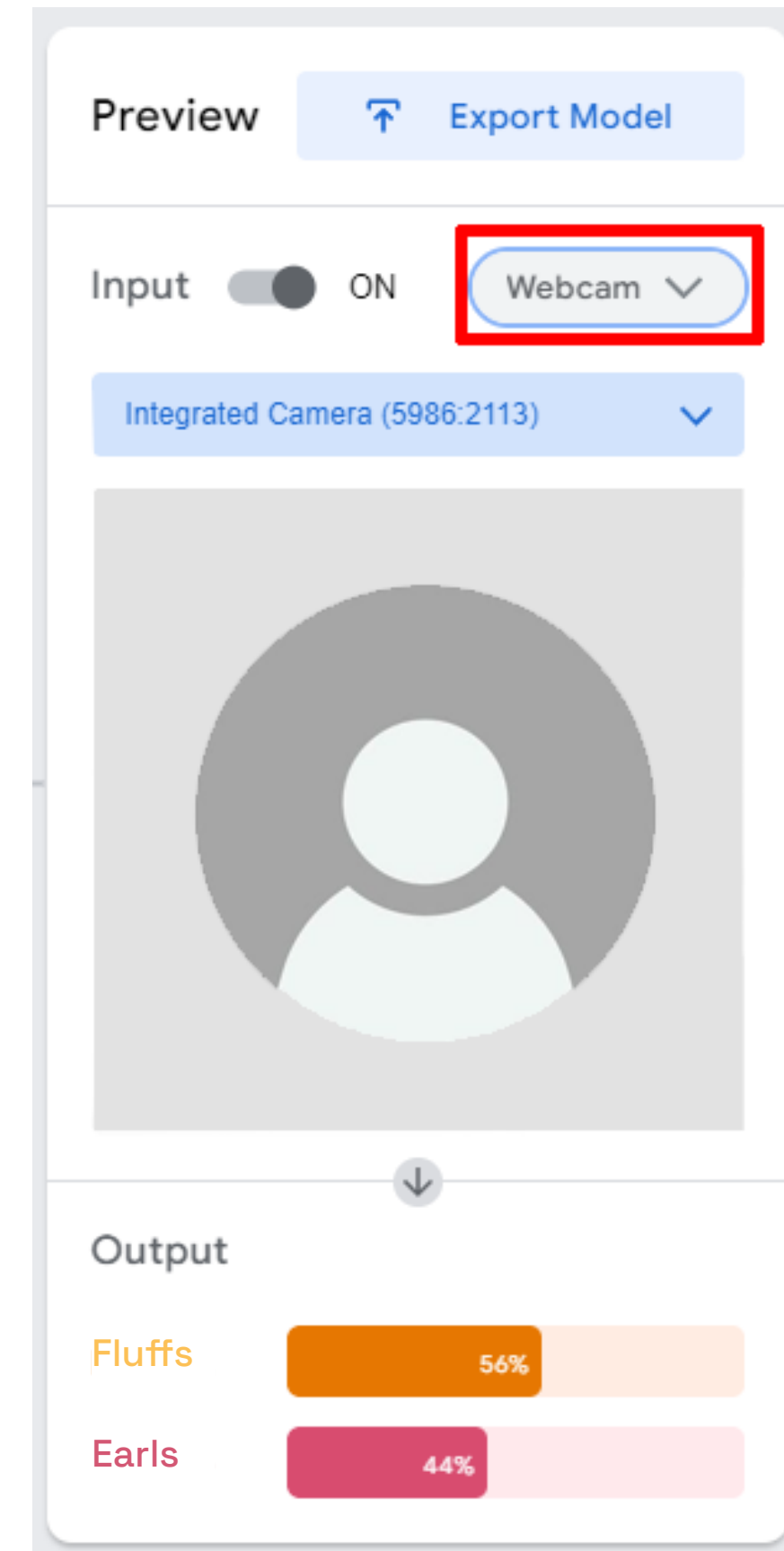
The model then looks for patterns and similarities on its own. When we later show it new images it hasn't seen during training, it searches for the same patterns it discovered earlier – and based on that, it decides which category the new image belongs to.

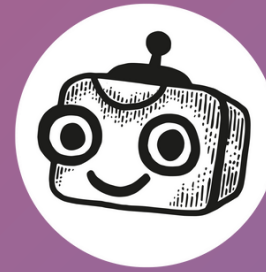
There are different ways machines can learn. Supervised learning is one of them – in this method, people simply tell the model what each example represents.



What happens if you try to recognize yourself using Teachable Machine?

Turn on your camera in Teachable Machine and, instead of using the founding image, try analyzing your own face. Will you be a Fluff or an Earl?
And why do you think that is?





See you next lesson!

On the alien planet, we'll discover more families – and once again
dive into working with Teachable Machine!