

Machine Learning For Kids :: Teachers' notes

Worksheet	Headlines
Activity	Train a computer to recognise headlines from national newspapers.
Objective	Test the computer's ability to recognise use of language <ul style="list-style-type: none"> How computers can be taught to recognise the source of writing How machine learning systems are tested.
Difficulty level	<p>Advanced</p> <p>The Scratch script for the advanced version of the project is long and complex. Most of it is provided in a starter project file, but finding the right places to make changes needs care. The concept of testing and accuracy can require some explanation.</p> <p>Intermediate</p> <p>The simple version of the project is easy to make, but typing in a lot of headlines to train the model can be time-consuming.</p>
Time estimate	2 hours (if students are following the advanced project to make a testing framework) or 1 hour (if students make a simple interactive animated project)
Summary	Students will collect examples of headlines from national newspapers. These will be used to train a machine learning model based on language in headlines. They will measure the accuracy of this model in a test framework in Scratch.
Topics	text classification, supervised learning, testing

Setup

Each student will need:

Print-outs	Project worksheet (download from https://machinelearningforkids.co.uk/worksheets) Blocks in Scratch scripts are colour-coded, so printing in colour will make it easier for students.
Access	Username and password for machinelearningforkids.co.uk

Class account will need:

API keys	None
-----------------	------

Help

Potential issues	<ul style="list-style-type: none"> Some national newspapers use language in their headlines that may not be appropriate for younger children. You may want to tell your class which newspapers to choose if you have concerns. It is important to close and re-open the Scratch browser window after each time a machine learning model is trained, otherwise Scratch will keep using previous output. "https://machinelearningforkids.co.uk" is a long URL to type for some children. You may find it easier to set up a bookmark that they can click on instead. <p>General troubleshooting and help at https://machinelearningforkids.co.uk/help</p>
-------------------------	--