Machine Learning For Kids :: Teachers' notes

Worksheet	Face Finder
Activity	Make a video face filter in Scratch that turns your face into a cartoon.
Objective	**Use a computer that has been trained to recognise what faces look like** • Learn how computers can be trained to recognise faces
Difficulty level	Beginner
Time estimate	0.5 hours
Summary	Students make a Scratch project with sprites that follow different parts of their face.
Topics	image classification, supervised learning

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.
Technology	Web-cam

Class account will need:

API keys	None

Customizing

If you use **PRIMM** approaches with your class, add a step where students predict how the project template works.
If you want to **increase the amount of coding** involved, delete some of the code from the project template and add steps to the worksheet so students code it themselves.
If you want to **encourage problem solving**, delete some of the detail in the worksheets and provide more general instructions instead.
Project template files & worksheets in MS Word format are available so you can **modify them to suit your class**.

Worksheets	https://github.com/IBM/taxinomitis-docs/tree/master/project-worksheets/msword

Help

Potential issues	• There is no need for students to create an account or log on to do this project. • Videos/photos taken by the webcam for this project are not uploaded to anywhere and will not leave their computer. All of the analysis is performed in the web browser. • "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. General troubleshooting and help at https://machinelearningforkids.co.uk/help