Year 8 Digital Technology students get creative by making Art with the help of Artificial Intelligence software

In term 4 the year 8 students are learning about Artificial Intelligence. They are developing their understanding of the expanding capabilities of human skills and decisions combined with AI systems. Students are using AI algorithms to create digital art.

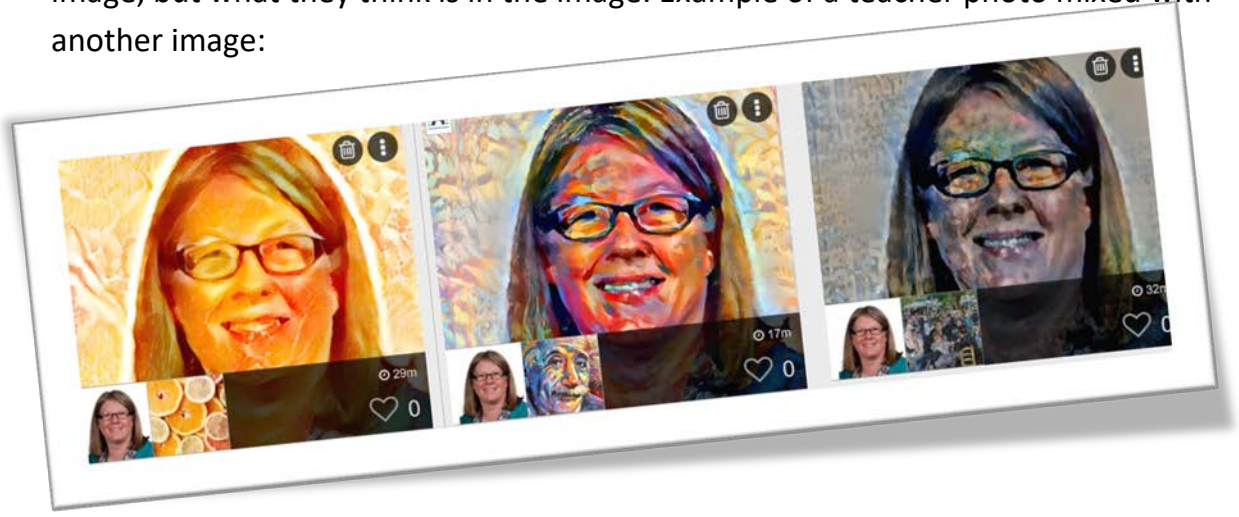
What is AI?

AI is about applying sophisticated algorithms to huge datasets, using strong computing power, which allows for unexpected insights, pattern recognition or computer vision, amongst other applications. It's not a technology of the future. It already shapes our digital world: recognising persons on imaging systems (video surveillance, automated recognition on social media); deciding what you see online, automating content on social media; recommendation engines in video sites or online shops; powering voice recognition technologies on mobile devices; traffic and route optimisation on maps and ride-sharing; categorisation, auto-reply, suggested text and spam filtering on email; financial support (fraud detection, automated loan decision).

The challenge set for our students was to use AI creatively taking into consideration how the algorithm was able to generate results based on user's input and work out why AI is turning a photo into an unreal image?

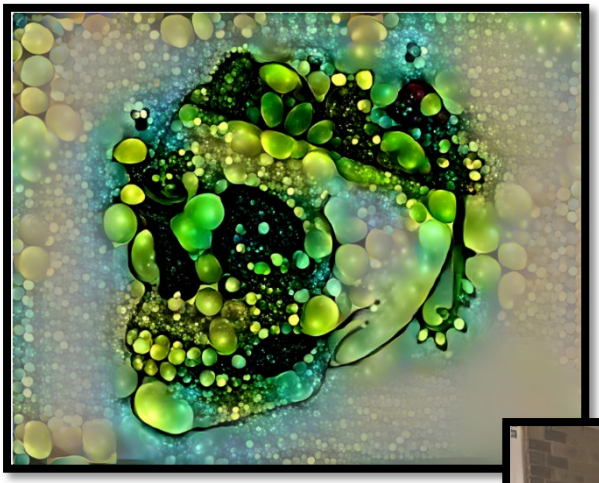
Image recognition algorithms, such as facial recognition or shape recognition, need to be trained with sets of images in order to learn how to analyse, understand and extrapolate a result. These systems are limited in scope by the datasets they're trained on. Image recognition algorithms, for example, are notorious for their vulnerability to unintentional racial profiling and false positives.

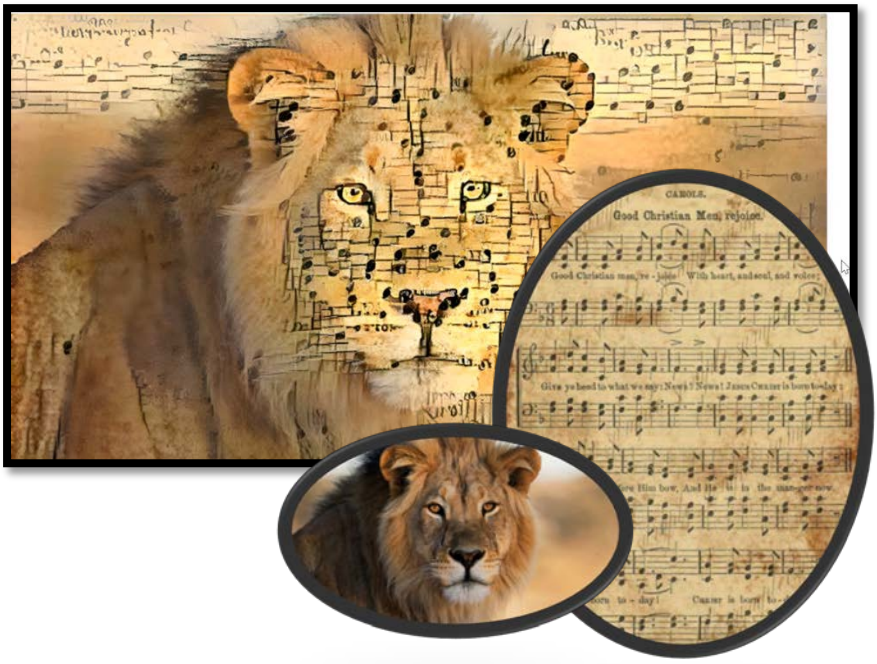
In our examples, the algorithms are interpreting what they "see" in the image-input, based on the types of shapes they have been trained on, describing not what is in the image, but what they think is in the image. Example of a teacher photo mixed with another image:

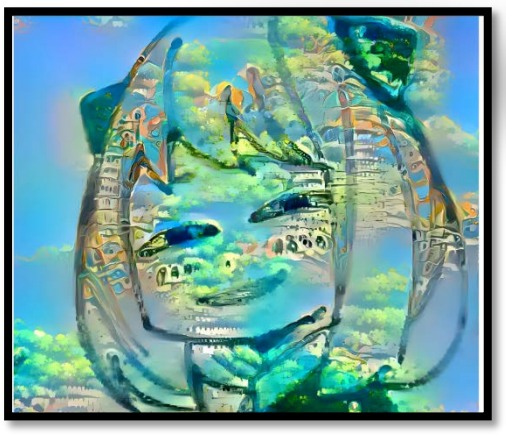


Examples of year 8 Student work

Students choose two pieces of artwork and the AI interprets the image output




CAROLS.
Good Christian Men, rejoice.



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Bibliography

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