AI is changing photography, but there's nothing to fear

Robot servants, automated factories and self-driving cars —these are some of the things that are highlighted whenever the concept of Artificial Intelligence is discussed. The technology is often painted as 'futuristic'; something that will reshape human life years from now.

However, most of us tend to ignore that AI is already having a profound impact on our lives. Millions of people use AI-powered tools every day to look their best whenever they open their front camera to take a selfie. Camera filters utilise different image manipulation algorithms that allow photos to be processed almost instantly. If done manually through photo editing, this process would take a lot more time.

This seemingly creates a dilemma. Photography is considered as an art. The person behind the camera isn't just supposed to take an image. They are also tasked to make it look more enchanting and captivating.

With automated tools doing this in mere seconds, where does it leave those who have taken up this visual art form as a career?

Can AI capture the world better than human photographers?

There is a great bit of fear-mongering around AI in nearly all fields of life. But it would be unfair to say that is all of it baseless and hyped up for no good reason.

Back in 2017, Google conducted a _fascinating experiment_. It took Street View imagery from Google Maps and transformed it into professional-grade photography. This was done through deep learning technology and no human photographer was involved.

Some of these images were so impressive that it was hard to tell whether an AI or a skilled individual was involved. 40% of the photos received top ratings from expert photographers.

Seeing how the technology is progressing, no one should blame professionals within the industry for feeling a bit threatened.

But as with every other field where algorithms are causing a disruption, AI in photography doesn't mean curtains for human photographers.

Pictures need a human touch

To understand the true impact of AI, it's important to first understand how photographers work. When a project is _assigned to photographers_, they are given a concept from the client. It's then their job to create a setting that will best meet the client's requirement.

In product photography, for instance, the photographer must envision the outcome from the client's point of view. Brands demand great attention on character expression, overall scene and lighting in particular. Small changes here could significantly alter a message that a brand is trying to convey.

Getting all this right and creating scenes that match the planned concept is the job of human photographers. AI cannot be delegated with such a responsibility. _Creating aesthetic photos_ requires a certain artistic touch. Algorithms can create outcomes based on certain patterns, they don't understand human psychology and how different shades of colour and designs impact a viewer.

And when it comes to complicated tasks such as compositing and prop replacement, AI is limited. Photographers understand the different variety of props required and the complex geometry that goes into the entire process.

People who make a living capturing moments on camera won't have their jobs stolen anytime soon. In contrast, the technology will help them produce better results.

AI is here to help not replace

There are no examples of AI driving *photographers* jobless. But there are many instances of technology assisting them in creating visually stunning art.

In 2018, Google's Pixel 3 camera entered the market with a Night Sight mode. This new feature used machine learning to adapt to different night lighting conditions and produce a natural result. All of this was possible without a tripod or a flash.

When the Pixel is stable, Night Sight increases the exposure time whenever there is a slight movement in the scene. This allows it to capture the maximum amount of light. When the device moves, it decreases exposure time and takes several dark but sharp captures. It combines all of them to produce a single bright image.

Similarly, publicly available solutions such as the ML Resolution feature in Pixelmator Pro can fix a low-resolution image. It does so through an artificial neural network designed to examine pixels, which is also used in image recognition and processing. The neural network is trained on a data set which allows it to analyse the specificity of different objects. When provided an image with low-resolution, it could predict the mixing pixels and create an image with a higher resolution.

If the past is any indication, AI's contribution to photography is only going to increase as the technology advances.

What does future hold for AI in photography?

Jon Brandt, Adobe's director of media intelligence, believes AI-powered creative applications will _act as virtual assistants_ to photographers. In other words, the artist will envision the final product and the algorithms will handle the bulk of the work that will go into it.

Many of the industry experts agree with this assertion. Machine learning and deep learning have proven their capability when it comes to tedious and repetitive tasks but they cannot imitate human creativity and ingenuity.

Going forward, photographers will have a friend not a competitor in AI. Photographers will focus on creating an impactful design as algorithms perform cropping and lighting adjustments. Humans and machines will work in harmony to create pictures that will tell compelling stories.

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