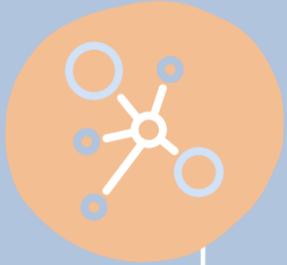


# the history of AI & PHOTOGRAPHY

by anika xia

a journey of how artificial intelligence  
has impacted photography



**1990s**

## CONVOLUTIONAL NEURAL NETWORKS (CNNs)

CNNs were introduced by computer scientist Yann LeCun. He was inspired by the human ability to recognize things visually. A CNN follows a hierarchical model of network building, then connects data points to produce an output.

## NOVEMBER 2016 LUMINAR'S RELEASE

Luminar is the first AI photo editing software that has been released. It can remove acne, wrinkles, and other unwanted facial marks within minutes. It can also recognize faces and surroundings without manual input so the user can easily alter different subjects. Since then, there have been many updated versions of the software.



**MAY 2017**

## ARESENAL BY RYAN STAUT

Aresenal, created by Ryan Staut, is an intelligent camera assistant. It is a hardware unit that sits on the camera. Some unique aspects of this technology is that it utilizes machine learning to assist with lighting, exposure, focus, and color dynamic settings.



## OCTOBER 2017 GOOGLE CLIPS

Google Clips is a hands-free camera that automatically captures "interesting", candid moments in life. It uses an algorithm, using machine learning, to detect the quality of the content and whether it is good enough to capture. There is a quality score across the video.



**2018**

## DEEPPAKE AI

Deepfake AI is a technology to distort, twist, and invert reality. Using AI, people can manipulate pictures and videos. For example, Adobe Photoshop has deepfake AI technology where one can use facial awareness to liquify the subject's face.



**APRIL 2018**

## HUAWEI P20 PRO - NEURAL PROCESSING UNIT (NPU)

The Huawei P20 Pro phone introduced the NPU to their phone's camera. The AI automatically detects the scene and adjusts the camera parameters to suit the scene.



**OCTOBER 2019**

## GOOGLE PIXEL 4'S PORTRAIT MODE

Google Pixel 4's phone camera uses a dual-pixel autofocus system. Machine learning is used to determine the different outputs. Each choice is evaluated, and eventually, the best setting is chosen and applied to the picture. This technology has also improved the bokeh light effect.

