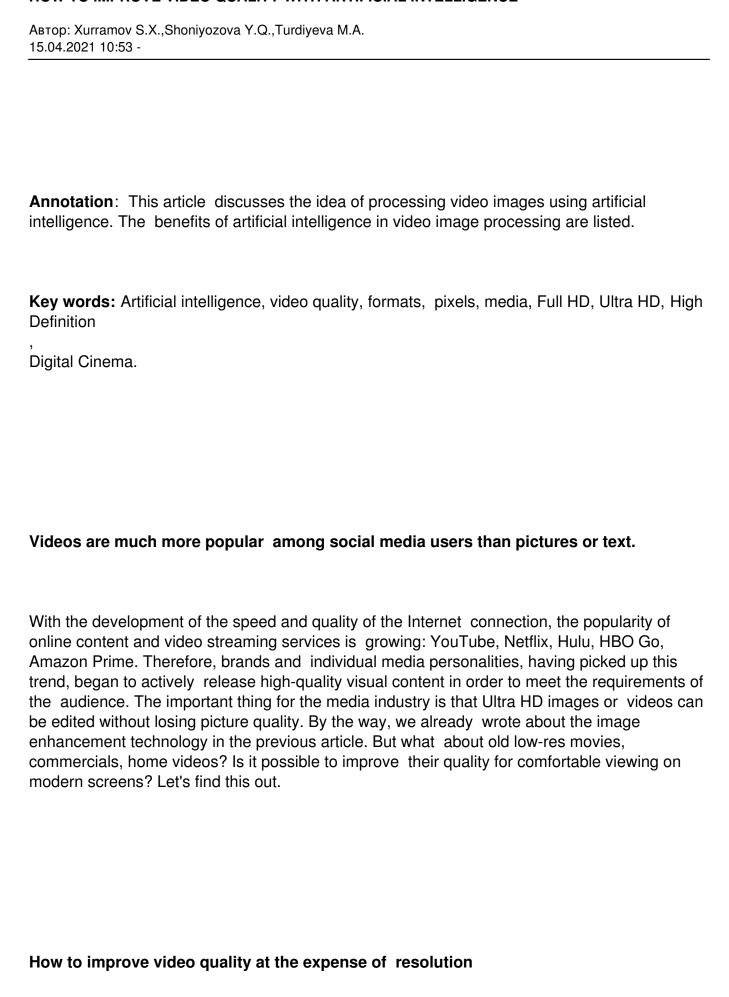
Автор: Xurramov S.X.,Shoniyozova Y.Q.,Turdiyeva M.A.

15.04.2021 10:53 -

HOW TO IMPROVE VIDEO QUALITY WITH ARTIFICIAL INTELLIGENCE
Xurramov Shohboz Xurram oʻgʻli
Tashkent university of information technologies
Karshi branch student 2 nd course
Shoniyozova Yulduz Qaxramon qizi
Tashkent university of information technologies
Karshi branch student 3 rd course
Turdiyeva Munira Abdishukur qizi
Tashkent university of information technologies
Karshi branch student 3 rd course



Автор: Xurramov S.X.,Shoniyozova Y.Q.,Turdiyeva M.A. 15.04.2021 10:53 -

First, let's list the most common permission types and terms. The resolution is usually given in the format width x height of the screen in pixels:

1920 x 1080: Full HD (High Definition) 2048 x 1080: 2K (Digital Cinema)

3840 x 2160: 4K (UHD - Ultra High Definition)

4096 x 2160: 4K (Digital Cinema)

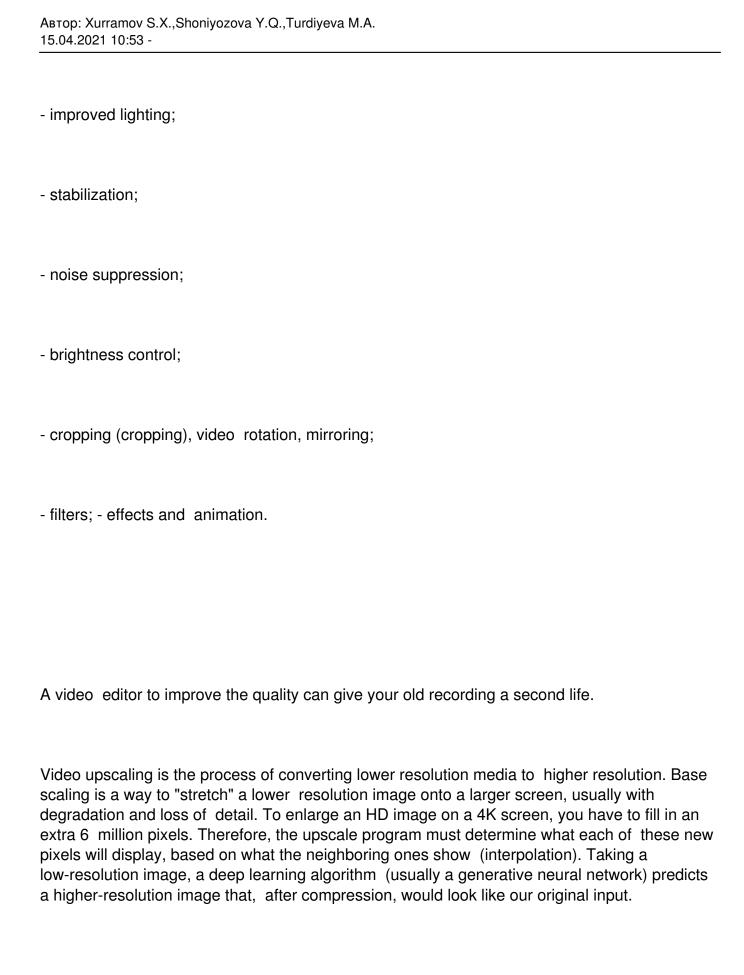
7680 x 4320: 8K (UHD) 15360 x 8640: 16K (UHD)

Today, the generally accepted resolution standard is 4K, and we are moving towards 8K screens. Youtube started supporting 4K for uploading videos back in 2010, when many manufacturers started producing low-cost cameras in this format. Since then, 4K displays and smart TVs have dropped significantly in price and gain in popularity. Even though the human eye is unlikely to physically notice the difference in picture quality above 4K, the race for higher resolution continues.

What can the program for improving video quality do?

In a nutshell, Video Enhancement is the process of enhancing video quality. Professional video editors usually support the following features:

- scaling (upscale);



Автор: Xurramov S.X.,Shoniyozova Y.Q.,Turdiyeva M.A. 15.04.2021 10:53 -

Al models are constantly being improved and their accuracy grows with each training cycle. In addition, different deep learning models can be applied to enhance different types of video content. And neural networks can also be combined: sometimes it gives amazing results. So, artificial intelligence helped to increase the famous "Arrival of a train at La Ciotat" (L'arrivée d'un train en gare de La Ciotat) to 4K. It is an 1896 French short black and white documentary directed by the Lumière brothers.

Instead of output. Al zooming in and out of video creates an effect that can be compared to a nearsighted person wearing glasses: it turns out that the world is full of details, trees have leaves, and road signs, signs and bus numbers can be easily read. At the moment, Full HD and 4K are still the most popular resolution formats for watching videos on the Internet and on TV, but the upper limit of picture quality has not yet been set. We specialize in developing personalized solutions for clients and can build MVP (minimum viable product) quickly and cost-effectively, which can be developed and scaled into a full-fledged product in the future.

Список литературы

- 1. https://evergreens.com.ua/ru/articles/video-enhancement.html.
- 2. Производство компьютерных компонентов промышленного видео производства ст 270-272 / ФЭ Кодиров, ФК Ачилова, С Ахматова -

Автор: Xurramov S.X.,Shoniyozova Y.Q.,Turdiyeva M.A. 15.04.2021 10:53 -

Инновации в технологиях и образовании, 2019

3. Производство аудиофильмов для мультимедийных устройств ст 272-274 / Ф

Э Кодиров, ФК Ачилова, С Ахматова - Инновации в технологиях и образовании, 2019