

ARTIFICIAL INTELLIGENCE / TECH / APPLE

Apple made an AI image tool that lets you make edits by describing them / MGIE, or MLLM-Guided Image Editing, will crop photos and brighten specific areas of a photo.

By [Emilia David](#), a reporter who covers AI. Prior to joining The Verge, she covered the intersection between technology, finance, and the economy.

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Illustration: The Verge

Apple researchers released a new model that lets users describe in plain language what they want to change in a photo without ever touching photo editing software.

The MGIE model, which Apple worked on with the University of California, Santa Barbara, can crop, resize, flip, and add filters to images all through text prompts.

MGIE, which stands for MLLM-Guided Image Editing, can be applied to simple and more complex image editing tasks like modifying specific objects in a photo to make them a different shape or come off brighter. The model blends two different uses of multimodal language models. First, it learns how to interpret user prompts. Then it “imagines” what the edit would look like (asking for a bluer sky in a photo becomes bumping up the brightness on the sky portion of an image, for example).

When editing a photo with MGIE, users just have to type out what they want to change about the picture. The paper used the example of editing an image of a pepperoni pizza. Typing the prompt “make it more healthy” adds vegetable toppings. A photo of tigers in the Sahara looks dark, but after telling the model to “add more contrast to simulate more light,” the picture appears brighter.



Figure 1: We introduce MLLM-Guided Image Editing (MGIE) to improve instruction-based image editing for various editing aspects. The top is the input instruction, and the right is the jointly derived expressive instruction by MGIE.

Screenshot of the MGIE paper. Image: Apple

“Instead of brief but ambiguous guidance, MGIE derives explicit visual-aware intention and leads to reasonable image editing. We conduct extensive studies from various editing aspects and demonstrate that our MGIE effectively improves performance while maintaining competitive efficiency. We also believe the MLLM-guided framework can contribute to future vision-and-language research,” the researchers said in the paper.

Apple made MGIE available through GitHub for download, but it also released a web demo on Hugging Face Spaces, [reports VentureBeat](#). The company did not say what its plans for the model are beyond research.

Some image generation platforms, like OpenAI's DALL-E 3, can perform simple photo editing tasks on pictures they create through text inputs. Photoshop creator Adobe, which most people turn to for image editing, also has its own AI editing model. Its [Firefly AI](#) model powers generative fill, which adds generated backgrounds to photos.

Apple has not been a big player in the generative AI space, unlike Microsoft, Meta, or Google, but [Apple CEO Tim Cook has said](#) the company wants to add more AI features to its devices this year. In December, Apple researchers released an [open-source machine learning framework called MLX](#) to make it easier to train AI models on Apple Silicon chips.

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