Cinematography and AI: A Continually Shifting Landscape

By Roberto Schaefer

As more and more sophisticated AI models come online, their effects on traditional cinematography grow exponentially. These tools should be seen as ways to enhance the cinematographer's job and workflow, not replace it. They offer a wide range of capabilities, including some purported to replace processes cinematographers have used for decades, as well as newer techniques developed in the digital age. Some tools allow cinematographers to visualize the desired work before spending a lot of time or money on testing, but they should be seen as previsualization tools. We can now use framing tools that not only show an accurate frame for camera- and lens-specific choices, but also show a comp of the live image, including actors together with an imported background. This background might be a Gaussian splat, a Blender or Unreal Engine environment, allowing cinematographers to understand the interaction of the live action with the AI- or VFX- designed environments.

Other tools allow users to enter prompts and generate still and video images, and even create a full-length feature film on a home computer. Six months ago, these outputs resembled plastic-like copies of real-life photography. But the technology has changed and continues to change almost daily. At the time of writing, more than six new versions of existing models have been announced, offering substantial improvements in output quality. These tools such as ChatGPT can also assist with prompting, providing results that can be quite astounding.

The pace of development makes it difficult to maintain a definitive list of the latest tools. Models such as Seedance 2.5, Kling 4, BeebleSwith, and LTX continue to improve while new tools such as Seedream regularly emerge. Their capabilities vary, with some delivering more promising results than others. Major technology companies are investing heavily in model development, alongside numerous Chinese companies producing highly competitive models. As these services mature, pricing may also change, particularly as providers seek to balance development costs with revenue from token usage. Given the speed of these developments, both the available tools and their capabilities are likely to continue changing rapidly.

The best approach is to learn what these models can do and how to incorporate them into your workflow. Short films and feature-length works that vary greatly—from mindless, action-packed, almost first-person shooter games to clever, emotional, and thoughtful storytelling, from plastic-looking people and objects to truly realistic and believable human and animal characters with eyes that reflect the soul and completely believable skin and hair. And these qualities are only becoming more realistic by the month.

It really comes down to the user's ability to tell a story—to engage a human audience in a story that envelops them completely and creates a believable world that they can empathize with. You can have the most amazing world-building tools, but without a story to truly engage an audience, those tools are wasted. They might be useful for things like TV commercials, experimental films, or music videos, but they still have a way to go without a true human creator. Programs now allow users to feed in a story idea. It can generate a script complete with storyboards, character references, costumes, props, and now short video sequences, even up to 20 seconds each, and assume that the lengths will increase exponentially in the upcoming months.

There is no question that the tools are getting better and smarter. However, they still need an eye that understands framing, lighting, and camera placement and movement to tell a story emotionally. That is where the cinematographer comes in: bringing knowledge and creative instincts to guide the tools toward a quality project.

It is true that digital camera quality has improved so much that, when used properly, even a cellphone can produce great images. Combined with new tools, this allows the cinematographer (and director) to accurately pre-visualize shots and entire scenes. In mid-September 2026, we are still in the infancy of high-quality AI models for filmmaking. We must track, test, experiment with, and learn to use these tools to our advantage, or risk being left behind when asked to collaborate on a creative project that uses AI tools to the best of their potential.

About the Author



Roberto Schaefer's career progressed through television commercials, Italian feature films, and Hollywood, leading to membership in both the American Society of Cinematographers and the Associazione Italiana Autori della Fotografia Cinematografica. Headshot photo credit: Douglas Kirkland

A contribution received from the author for the 2026 Progress Report.
Copyright © 2026 by SMPTE.

DOI: 10.5594/ 10.5594/JMI.2026/SSYA4984
Date of publication: 15 November 2026