

# VFX Artist

## Spotlight

Do you want to have a job that could win you an Oscar? We know that training to become a VFX (visual effects) artist requires a lot of training in programming and computer graphics software, but the industry is constantly progressing, so a career in visual effects will require that you stay up-to-date with the latest trends and technology.

## Personal Connection

A VFX Artist uses computer software to insert special effects that can't be captured with live action shooting into films. Becoming a VFX artist is all about telling a story visually and making it believable by creating special effects using the latest computer software and tools:

- Do you have a passion for film, technology, coding and digital art?
- Do you love being creative?
- Are you detail oriented?
- Do you enjoy problem solving?
- Are you excited about learning about the latest technology to create visual effects?

## Other Connections

Even if you don't end up becoming a VFX artist, there are many different career paths that involve telling a story using digital art, including:

- Creating 3D models using computer software as a 3D modeler
- Converting still art into moving images as a computer animator
- Creating visual images to convey a message or to entertain as a graphic designer or multimedia designer
- Designing interactive elements of digital media, keeping in mind user enjoyment, as a UI/UX Designer
- Creating graphics for a video game as a video game designer
- Creating the artistic aspects of a website as a website designer
- Developing new visual effects or graphic design computer programs and tools

## Fun Facts

Some fun trivia about VFX:

A VFX team invented "bleeding edge" technology to de-age Robert De Niro: The Irishman follows characters across different ages, so technology was required to use the same actors throughout the film and make them look like they were different ages. The VFX team decided to have Robert De Niro reenact a scene from Goodfellas in order to create software that could make De Niro (74 years old, at the time) look the way he did 30 or 40 years ago. [Read more here.](#)

Visual effects are time-consuming: According to a VFX artist who makes YouTube videos, every minute of their videos "requires a full 12-hour day of filming and at least a week of visual effects/editing."

[Read more here.](#)

Which VFX scenes in movies changed the industry forever? This great site tells you that history of filmmaking. How many of these classic scenes have you seen?

[Read more here.](#)



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## STEM Connection

Here are just a few ways that new and emerging technologies are transforming visual effects:

- Artificial Intelligence can reduce the cost and time required for visual effects: 3D animation is time-consuming and expensive, and advancements in artificial intelligence (AI) have made it easier to automate animation. AI can learn anything, from the face shape of thousands of characters to how those characters move, and generate new characters based on that input. "AI and Deep Learning can slash time and costs spent in computer graphics and visual effects to 1/10th." [Read more.](#)
- Filmmakers create scenes in a combined physical and digital world with Virtual Reality: As visual effects have grown to be a huge part of films and television today, there is a growing divide between what the director can see in live-action shots and what has to be imagined will be added digitally later. It becomes difficult to "direct a story when the director cannot see everything they are supposed to be directing." This can increase the time and cost required for VFX after the fact. Virtual Production uses Virtual Reality (VR) and Augmented Reality (AR) to unite the physical and digital world in real-time. "When you're using VR to make the movie, it's as though you're standing on a film set in the real world, even though it's all virtual." VFX can be "done faster with fewer people [and that] makes a better film more cheaply." [Read more.](#)
- USD removes the barriers to creativity for visual effects: Pixar's R&D team developed open source software, Universal Scene Description (USD), which "is set to have a seismic impact on the VFX industry." Traditionally, VFX would happen in stages, but if you wanted to change anything, you'd have to go back to the beginning of the process. With USD, you can create scalable interchange of 3D scenes, which empowers VFX artists to make creative changes without impacting the entire process. With USD, "people can work simultaneously on the same assets without treading on each other." [Read more.](#)
- VFX studios are turning to the cloud to increase their flexibility: VFX work requires a significant amount of hardware, but "by leveraging cloud-based resources, studios have the ability to take on far more and bigger projects than what they could handle with on-premises resources." Cloud resources also have the capacity to provide results quicker. "With cloud rendering, studios can increase productivity since artists are spending less time waiting for results and more time iterating to improve the overall quality of the project." [Read more.](#)

## Articles, Videos, and Podcasts of Interest

Watch this [TED talk](#) about the art and science of special effects.

Take a cinematic journey through special effects in [this TED Talk](#).

Read this beginner's guide to becoming a VFX artist (with or without a university education).

If you're looking for an idea of what a day in the life of a VFX artist is like, then [this article](#) will give you that and more.

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## Journeys to Becoming a VFX Artist

The path to working as a VFX artist may seem like a faraway dream, but both people in the stories highlighted below started at the age of 12 years old, learning visual effects skills online.

Learn about one VFX artist who learned visual effects on his own through online tutorials:

Aaron Benitez was homeschooled and started making videos with his brother when he was 12 years old. His love for film developed from there. At the end of high school, Aaron wanted to pursue one of his two passions—film or biology. Ultimately, he decided to pursue his passion for film in college.

When Aaron started making videos, he used online tutorials to incorporate visual effects, and by the time he made it into college, he already had a lot of experience with visual effects—“all self-taught, all done online.” At that point, he partnered with Zach King and was able to use his passion for visual effects to create their YouTube videos.

Aaron’s advice to someone who wants to pursue visual effects is, “Look online. There are an unlimited amount of resources that you can find online and most of them are free. Especially with an industry like visual effects, where most of the work is done on the computer, you can really learn a ton about what it takes to get into the film industry as a visual effects artist.”

Aaron lives by the advice his parents taught him when he was younger: “If you work like no one else right now, then you’ll be able to live like no one else in the future.”

Learn more about Aaron’s story [here](#).

Read about one person’s journey from making videos as a hobby at 12 years old to working as a VFX artist for Spider-Man:

Usama Siddiqui started editing his own videos when he was 12 years old. “Back then, I had no idea I could turn my hobby into a career. I just did it because I loved it.” As Usama got older, he started expanding his knowledge into motion graphics and design, but “it wasn’t until Transformers 2 when I saw Optimus Prime burst through a building in an epic fight that I knew I wanted to be a part of something as surreal as that.” After that, he started pursuing a career as a VFX artist and enrolled in a film and television program in college.



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Usama believes the most critical skills for this role are “basic programming knowledge and a solid understanding of 3D software. There are a lot of technical issues that come about that don't always have a straight forward solution. You need to have a creative mindset and be able to problem solve creatively. Once you start familiarizing yourself with the internal programming languages for each special effects software, it will cut down a lot of your time and enable you to implement changes more effectively.”

Usama is constantly learning new things to keep up with the new trends and technology in visual effects. “Considering that this industry is constantly progressing, it is extremely important to stay updated with the latest trends and technologies. Otherwise, you risk getting left behind. When a problem occurs at work... I'll watch a lot of tutorials online. YouTube and Google really are your best friends here... It also doesn't hurt to get involved with online communities and forums for FX Artists, where you can interact with others in the field to further advance your skills.”

Usama's advice to a student that wants to follow in his footsteps is to “start as early as possible. Play around with various software and programs, watch tutorials. Work on mini projects until you feel comfortable using the software. Try to create as much as you can. You will find that there is a lot of problem-solving involved and over time it will become easier to find creative solutions to your problems using these tools. Remember, the more you have on your tool belt, the more of an asset you will be to a prospective employer.”

Read more about Usama's story [here](#).

