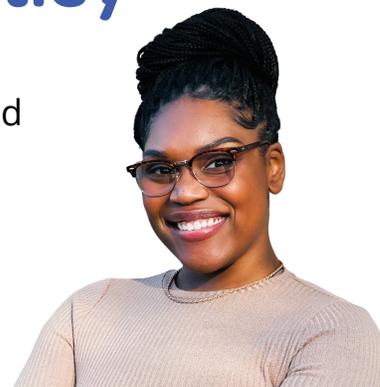


Meet a STEMist: Amber Whatley

Meet Amber Whatley. She is a **lighting designer**. As a lighting designer, Amber uses lights to create the look and atmosphere for plays, musicals, operas, concerts, tours, television shows, movies, art installations, and more.



Amber needs to know about the science of light for her job. She also needs to know how to design spaces.

Imagine a music concert, a TV show, or a play without any lights. First of all, you need light to see. Without light, you wouldn't be able to see the concert, show, or play. But lights do more than allow you to see. Light can make people feel a certain way while watching media. For example, Amber might use bright, fast-



Amber designed the lighting for this scene. What do you notice about the light? How do you think the lighting adds to the dance performance?

moving lights at a concert that has fast, happy songs. What kind of lighting might Amber use during a slow sad song?

Amber is also an educator. She teaches students about designing with lights, the science of light, and how to use color theory to create the best on-stage lighting.

Read the interview below to learn more about Amber!

What was your childhood like? Did you like science?

I grew up in Montgomery, Alabama. I was always a fan of math and science and I craved learning. I was also a lover of the arts! I was part of the theater and band programs in elementary school.

Being in theater and band kept me busy! I always had something going on. One week I would be in a play like "Annie," and the next week I would be playing the clarinet in a band recital!

One day I discovered there was a backstage part of theater. I discovered that there were people who controlled the lights that twinkled while I danced on the stage. I was immediately invested; I wanted to be one of the people who controlled the lights. That same excited feeling I had about math and science was transferred over into arts.

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Describe a typical day at your job.

There's never a typical day. On some days I can spend hours in front of the computer doing **photometrics** and creating a **CAD rendering** of a stage.

Other times I'm traveling to different theaters to design the lights for a specific show. Sometimes I'm in the classroom using lived experience to teach my students about lighting design and technology.

Photometrics is when you measure light to see how bright it is.

CAD stands for "computer-aided design." CAD is a software program. A **CAD rendering** can be used to create designs.

Describe a time in your career when something did not go as planned.

I was already halfway through college when I realized that lighting design was what I wanted to do as a career. Because of this, I had taken many classes in other subjects and most of my college classes were not focused on design. Therefore, when I graduated, I was unprepared to start a career as a designer. Rather than give up, I went to graduate school to get the many skills that I was missing.

Graduate school was also hard because I was there learning skills that the other graduate students already had. A strong mindset and perseverance eventually let me catch up to my classmates, and even surpass some of them!

What advice do you have for students today?

Never take no for an answer. Just because you don't see anyone who looks like you doing it doesn't mean that it is not possible. If you want something go get it.

Never let anyone douse the light that shines inside of you.

