

## Creativity

For the first fourteen years of my life, I didn't consider myself a creative person.

I wasn't great at drawing or painting. You wouldn't want to hear me singing, either. I tried learning to play the piano but quickly lost interest – luckily, my parents didn't push me to pursue piano lessons.

When I was 14, I was introduced to the world of robotics and engineering through a local robotics club. There, I realized that my creativity simply had a STEM spirit to it.

Once I got to know Scratch, Python, and the basics of mechanical and electrical engineering, there was no stopping the stream of ideas rushing through my mind. I couldn't wait to tinker with actuators and circuits or figure out ways to program new behaviors.

I believe that building a maze-solving robot was the height of my creative ventures in this field. Building the robot itself was fast and required simple components like the car chassis and a motor driver. Figuring out how to program the robot to solve the maze, however, took a lot of trial and failure – and creative problem-solving – as I was writing line after line of code and testing it again and again.

I built a whole maze for testing the robot in our garage, changing its layout from time to time to test for more scenarios. My creativity helped me solve problems like sensors not picking up walls under 2 inches tall and navigating corners that aren't perfectly 90 degrees.



While this maze-solving robot won me the local club's competition the following spring, that's not why it's dear to my heart. Working on it showed me that creativity isn't limited to creative arts like drawing and painting. I learned that I can and should approach engineering problems creatively, too, to find the most suitable solutions.