

Wired for Good: Programming a Better World
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The serpent's searing gaze fixed on its target as its menacing hiss resonated through the air. Its sleek body propelled through the grass; muscles poised for a decisive strike. The mouse was cornered, and as he looked death in the eyes, fear infiltrated his body. He was frozen before he got swallowed whole.

I demoed the game I had programmed as my dad watched with contentment, pulling me into a warm hug and congratulating me on my achievement.

I was seven when my dad introduced me to MIT's creation, [scratch.edu](https://scratch.mit.edu), a coding site for kids. Whether it was the coding or the captivating array of colors, I was hooked at first sight. My dad, a fellow geek himself, was grateful that I had begun my coding endeavors. He demonstrated some of the website's features, showed me how to select avatars to use in my programs, and taught me some coding basics. I could make my own video games! No more playing Mario on the Wii. Things were about to get real. I would design games like Pacman, Galaga, and dozens more using my favorite cartoon characters. My greatest accomplishment, though, was my snake and mouse game. The user controlled the snake's movement in an attempt to capture an evading mouse. I immersed myself in it daily, refining the code and scenery. By creating my own project, I cultivated a feeling of satisfaction that was unmatched.

As I entered my teenage years, my curiosity led me to explore more complex STEM topics. As I deciphered intricate CADs and constructed robots from scrap aluminum, I reflected on the inspiration that started my journey – the simple game I had created as a kid on [scratch.edu](https://scratch.mit.edu). I was grateful that my dad helped me find my passion, and that feeling of gratitude fostered a determination to pay it forward. I wanted to help other children in my community discover their own passions.

Volunteering has an unparalleled ability to shape individuals and communities, instilling hope and promoting growth. Through a series of volunteering experiences, I have been fortunate to witness the impact that giving back can have. Each endeavor has left an everlasting mark on me, proving the true potential volunteering can have.

One of the most significant volunteering experiences I have been a part of was hosting robotics camps for children in collaboration with MetLife. For two consecutive summers now, my dedicated robotics team and I crafted a STEM curriculum from scratch, complete with interactive activities, live demonstrations, and presentations from tech industry leaders.

Witnessing the campers' excitement as they built and programmed robots was undeniably inspiring. On the final day of the camp, we hosted a mini robotics competition where campers demoed their robots, showcased the designs they created, and learned from those around them. The campers asked each other thoughtful questions, created new friendships, and learned in the process. Through the camp, we inspired eight young participants to join competitive robotics teams, proving that with commitment and guidance, we could help others find their passions.

Building on these ideas, my robotics teammates wanted to use our MetLife Camp experiences to address common societal issues. We noticed that the tech industry, historically dominated by males, is a rapidly expanding sector with plentiful opportunities. Our team identified the gender gap in tech fields and collaborated to organize STEM events tailored for girls in our community. To inspire girls to take the leap into this field, we designed events filled with creative CAD lessons, enjoyable games, and robot demonstrations. Observing the young girls immerse themselves in STEM concepts, whether through constructing spaghetti marshmallow towers or exploring coding basics, was deeply rewarding. We had effectively sparked interest in the girls and provided them with a baseline for a future as women in technology.

While technology offers boundless opportunities, not everyone enjoys equal access. In an effort to bridge this gap, I collaborated with others to design a coding curriculum tailored for underprivileged children. By creating colorful flyers and leveraging platforms like Facebook, we gained attention for our startup non-profit. Within the first two weeks, an impressive 32 children registered for our classes. The students formed friendships with like-minded individuals and discovered their own potential; we had ignited interests that could shape their futures.

As a culmination of all the knowledge gained from these experiences, I immersed myself in NC State University's robotics research team. As a volunteer high-school researcher, my task involved designing robots to mitigate global pesticide use. The endeavor was undeniably challenging, but the thought of contributing to sustainable agriculture propelled me forward. Through collaborative efforts with Ph.D. students and unwavering determination, we created viable solutions that are now being implemented in plantations. This experience highlights how utilizing your passion in volunteer work doesn't just impact humanity; it also enhances the well-being of our planet.

My approach to volunteering may not adhere to tradition. When people think of volunteering, images of food banks and homeless shelters often come to mind. However, I've chosen a different path. By leveraging my strengths, I've volunteered in areas aligned with my future career aspirations. This approach allows me to simultaneously advance my education while contributing positively to the community. Volunteering, to me, is not merely about assisting others; it's about leading projects that resonate with one's beliefs. The volunteer work I've undertaken has enriched my knowledge and deepened my compassion, and for that, I am forever grateful.