

Easton LaChappelle: Problem Solver



Easton LaChappelle in his lab. Photo used with permission.

Growing up in Colorado, Easton LaChappelle was known as a kid who liked to tinker. For his 8th grade science fair project, Easton created a prototype design for a robotic hand using Legos, wire, and tubing. By the age of 16, Easton had modified his design using 3D printer technology and turned his robotic hand into a robotic arm.

While displaying his invention at the Colorado State Science Fair in 2012, Easton met a girl who had a prosthetic arm. From her, he discovered that prosthetics technology had not changed much in the last 30 years. He also learned that her arm was very expensive and not very flexible. Even worse, as she grew, she would have to replace the prosthetic arm frequently. This motivated Easton to work harder to find a better solution for people who are missing limbs.

He took his new and improved Robo Arm to the International Science and Engineering Fair, where he came in second place. People started to recognize the important work Easton was doing. Easton even had the chance to visit the White House and meet President Obama. He also got the chance to work as part of a team at NASA. He has traveled around the world as a guest speaker and has done a TEDx Talk about his invention (you can check it out here: https://www.youtube.com/watch?v=CfmNXPMjChs).

In 2017, Easton's prosthetic device was fitted onto a 10-year old girl in Florida. Momo was born without a right forearm and hand. The device is lighter than most other prosthetics and it also allows Momo to grab things and use her fingers as she normally would. And, it costs a fraction of the price. You can see a video of Easton and Momo here: <u>https://www.youtube.com/watch?v=j9_YkF5Rcv4</u>.

To ensure that anyone can access affordable prosthetics on a global scale, Easton founded <u>Unlimited</u> <u>Tomorrow (https://www.unlimitedtomorrow.com/</u>). To do this, they send 3D scanners to people missing limbs that can capture their measurements and then use software and 3D printers to create a one-a-kind arm for them.

So, what's next for Easton? He moved from Colorado to New York to expand his business. In 2019, he raised over \$500,000 to create and donate 100 prosthetics to 100 people. Currently, he's working on a project to help the deaf hear, and an exoskeleton that can help people who are paralyzed walk again. As he says in his Tedx Talk, "I want to help people...this can change some people's lives...my goal is to help people. It's turned into something I never expected."

Questions:

- 1. What problem did Easton set out to solve?
- 2. Are there any problems around you that you would like to be able to solve?
- 3. How could you go about solving the problem you identified?