

High School Engineering Student Develops Custom 3D Prototypes





You've already seen how Jeff Farr inspires his students with [Raise3D](#); Now, join his engineering student John Gardner and see how Raise3D inspired him to build incredible things.

John Gardner is a student at Foothill High School in Tustin, CA, who has a great passion for engineering and technology. Once introduced to the Raise3D printers at Foothill High School, John began to develop his prototypes for an electric skateboard, custom-fit prosthetic limbs, and more. John is an amazing example of how [3D printing in the education industry](#) can help students blossom.

<https://www.raise3d.com/case/engineering-student-prototyping-and-fabrication-with-raise3d-video/>

JOHN GARDNER – Student

Foothill Engineering & Technology

JG: One of my favorite projects so far has been my electric skateboard. Using the [3D printer](#) was a huge plus because I was able to print actual parts—for like bracketing, and just to see how things worked and where my weak points were and whatnot. Then I went to my second iteration, and I was able to really cut down costs and try different things until I find out what worked best. I was able to top the distance and the range of it, and also keep a strong top speed which really makes it fun, and useful—a tool I can use when I go off to college.

“3D printing is definitely going to be in my future, just because it’s most likely the future of where we’re going, and there’s so much that can be done with is.”

When Mr. Farr introduced the Raise3D printers, it was just kind of one of those printers where you know it’s going to work, so you’re never really struggling. I was online, just searching around and seeing what you can do, and I noticed the prosthetic legs and I was like ‘that’s pretty cool’ so I decided to print one, and what I’d like to do is the socket—everyone has a different leg—possibly 3D print it to their size and make it fit exactly how they can just by taking a mold and then a 3D scan, and it would fit perfectly.

I think being able to have this on my resume and just going on my college applications really helped me get into school, and not only helped me but made me understand a little bit more of the math required, and the things that have to be thought out before you can just jump into something and build something. I really believe the engineering class has helped me become who I am and what I’ve wanted to do, and where I want to be in college.

Connect with Raise3D

Do you have a great 3D printing success story and think it would be cool to be featured on www.raise3d.com, we would love to learn more! Write to us at inquiry@raise3d.com

For more information about Raise3D printers and services, browse [our website](#), or [schedule a demo](#) with one of our 3D printing experts.