

## 2019-2020 Outstanding Thesis Award Winner Evan Snyder



Evan Snyder's thesis, *Minimal Surfaces and The Weierstrass-Enneper Representation*, focuses on the field of minimal surfaces in differential geometry: he first investigated the proofs of several key theorems related to the Weierstrass-Enneper representation, and using computer modeling, created 3D models of minimal surfaces. He then used what he learned to create some new minimal surfaces of his own design, which he called Snyder's Surface, The Bat, and The Vortex. An understanding of minimal surfaces has applications in a number of disciplines, including engineering, physics, and biology. Written for his M.A. in Mathematics, the complex and innovative work earned him the 2019-2020 Outstanding Thesis Award in the Computer Science, Mathematics,

Biological Sciences, and Physical Sciences category.

Snyder's love of mathematics and his ability to clearly communicate a complex subject shine in his summary of his work:

"I think it is safe to say that mathematics gets a bad rap among most people, and is typically thought of as being dull, unimportant, or just too complex to bother with. I believe that my thesis puts these notions to rest, and my work is a good example of how elegant and applicable mathematics can truly be. Hopefully, my work not only contributes to the topic of minimal surfaces, but also helps in shifting societal perception of math, and brings more people into the fold to study this beautiful subject."

It's also evident that Snyder loves to teach; he is currently a high school math teacher in Riverside and he is considering teaching at the community college level. He is also thinking of returning to school as a student to pursue a Ph.D., "because I already miss taking classes and being in an academic setting. I truly enjoy teaching and have a lot of fun with it. I know that it will be something I do for the rest of my life in some capacity."