

## Biography

Since starting my Mechanical Engineering degree in 2019 I've explored lots of different paths of what I could do in the future, and none have caught my eye like robotics. I will be graduating in May of 2023 with a Bachelor of Science in Mechanical Engineering along with minors in unmanned autonomous systems, manufacturing quality and mathematics. With this degree I aspire to be able to work in the fields of robotics, control systems and computer science as they were by far my favorite subjects to study. A dream career would be to work in an R&D lab such as for NASA, SNC or Boston Dynamics where I can create and build designs using all the knowledge I've gained. I also may end up returning to school to acquire a masters or Ph.D. or even work towards engineering management.

My research project is focused on creating a lightweight soft gripper featuring TSA's (Twisted string actuators). This gripper would then have the capability to be attached to a quadcopter giving the gripper mobility and the drone the capability to grasp and carry objects. The goal is to be able to have a drone be able to pick up and grasp a uniquely shaped object around the size of a softball, be able to carry the object, and set it back down in a desired location. This project would then be capable of assisting NASA with exploration and sample collection.