

# Background

This project is contained within the field of mechatronics. Mechatronics is comprised of several components that work together in order to form a complete system. This arrangement combines electrical, mechanical, and computer components into a single working product. Products such as these are commonly used in everyday life and are necessary in the world in which we live today. Some examples of mechatronics products are washing machines, change dispensers, and even microwaves. The ability to combine the components into a networked procedure that will function as a whole is completed through specific computer programming that weaves together with a variety of sensors and actuators to fulfill certain assigned tasks. These tasks can range from the most simple to the most advanced, but without the help of mechatronics life as we know it would be completely different.