

A Dexterous Gripper for Complex and Delicate Tasks

Botchwey, Edward (School: Charles R. Drew Charter School)

Gripper are robotic hands that are usually made to simulate the things human hands can do. Many modern-day grippers focus on in-hand manipulation and the ability to adapt to objects of different size. One notable example of this would be the Stewart hand, which uses its spherical joints to rotate any object it has picked up. Although modern-day gripper designs have advanced significantly, new designs are needed to improve gripper adaptability. This project aims specifically to create a gripper to handle complex tasks in unique and varying environments.

Awards Won:

Central Intelligence Agency: First Award: \$1000 award