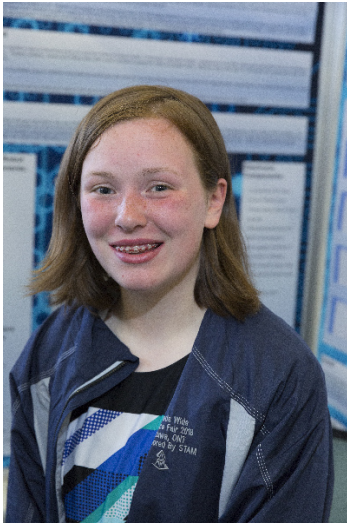


CWSF 2018 - Ottawa, Ontario



Emily Doyle

CRAM [Coded Robotic Arm Model]

Challenge: Innovation

Category: Junior

Region: Bison

City: Winnipeg, MB

School: Holy Cross School

Abstract: I constructed a robotic arm using parts generated with a 3d printer. Using small servo motors and controller, I programmed a specific movement sequence to grab a marble, pick it up and drop it on a ramp at a higher elevation. By changing the program loaded into the controller, the robotic arm will switch to manual control so that further capabilities can be demonstrated.

Biography

Hi, my name is Emily Doyle. I am 13 years old and I am in Grade 8 at Holy Cross School in Winnipeg, Manitoba. Outside of school I play competitive softball for the U14 Smitty's Terminators. Through my school I participate in science fairs and the badminton. I also enjoy interacting with my friends throughout the course of the school day. My favorite subjects are science and math. My love for the subject of robotics is what strived me to create this project. I am fascinated by the concepts and theories of robotics and hope to learn and create more sophisticated robotics in the future.