Diba Shojaeigoradel

Machine Vision

Challenge: Innovation
Category: Intermediate
Region: York
City: Thornhill, ON
School: St. Robert Catholic H.S.

Abstract: In this project I was able to find a reliable and accurate algorithm for object tracking. I used histogram filter, changed RGB color space to HSV color space, used backproject and bitwise(&) with mask, and created track bars to change the values of saturation and value. By combining these filters together, my program was able to recognize and track the objects successfully.

Biography

Hi, I'm Diba. I am currently in grade 9. This is my second year attending the CWSF and find it a thrill. Nothing excites me more than science and how just about everything works. I thank my previous school, As-sadiq Islamic School, for supporting me and my projects. My most interest is in computer science and robotics. Machine vision is the start of new technology, my goal is to improve and advance the ability of machines to track and detect objects. I have been able to create a new algorithm for machines to track the color of an object accurately. My next steps are to interact machine vision with micro-controllers for multipurpose applications. In school, I had been a part of my schools robotics team (Retro-Rams 4001) and had a blast! I believe hard work and effort can get you anywhere. " The whole purpose of education is to turn mirrors into windows." -Sydney J. Harris.