# **Trevor Sherrard**

### CONTACT ME

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### **SUMMARY**

I am a roboticist, and machine vision enthusiast. I am a college student with a passion for seeing my software come alive in robotics and machine vision projects. I am currently seeking a Spring-Summer 2017 Co-Op.

#### WORK EXPERIENCE

JUNE 2016 - PRESENT

iCanCodeClub

## Coding Instructor

Responsible for making and teaching lessons and coding challenges in robotics and the arduino platform for the students at the iCanCodeClub enrichment center.

NOVEMBER 2014 - JULY 2015

Cuyahoga Community College

## Physics Student Lab Assistant

Responsibilities included taking down and setting up laboratory experiments for earth science and physics classes. Also assisted professors during the lab with answering students' questions about the material at hand.

JUNE 2012 - JULY 2015

Saint Edward High School

# Engineering Camp Instructor

Worked the summers of 2012, 2013, 2014 and 2015. Helped promote interest in STEM related fields, specifically robotics and computer science, to middle school students. Duties included material procurement and classroom instruction.

#### **EDUCATION**

2015 - PRESENT Rochester Institute of Technology

B.S ELECTRICAL ENGINEER-

ING; ROBOTICS

Computer Science House

2014 – 2015 Cuyahoga Community College

COMMUNITY COLLEGE Physics Club

### ROBOTICS PROJECTS

2014 SortME (http://www.trevorsherrard.com/SortME.html)

My Computer Vision Robot Platform

2015 RoveME (http://www.trevorsherrard.com/RoveME.html)

My Large scale, built from scratch ROS robot. Built from a basic andymark differential drive robot chasis, RoveME is my personal robotics testbed.

2015 ToolID (http://www.trevorsherrard.com/ToolID.html)

Automatic tool identification for the computer science house project room. Allows user to query the type of tool using computer vision and HAAR classifiers. A laser diode on a two axis stepper motor gimbal will then point to where that tools resting location is.

### COMPUTER VISION PROJECTS

2014 HAAR Training Tutorial Web Page (http://www.trevorsherrard.com/Haar\_training.html)

A tutorial I wrote on how to train HAAR classifiers using OpenCV. It covers everything from sample preparation to training itself.

2015 Mobile HAAR tester application (http://www.trevorsherrard.com/ComputerVision.html)

An application that uses the OpenCV on the android platform to test mobile classifiers on the go. It allows for downloading of classifier on the go from a URL.

2015 CSH Augmented Reality Logo (https://youtu.be/dxlEk2E-DCk)

An Augmented Reality project for the Computer Science House at RIT.

## PROFESSIONAL SKILLS

ADVANCED LEVEL C++, ROS, OpenCV,

Forward/Inverse Robot Drive Kinematics.

LiDAR

INTERMEDIATE LEVEL Python, PCL (point

cloud library), PID Tuning, VHDL, Linux

BASIC LEVEL Torch, Caffe, LATEX