

Trevor Sherrard

CONTACT ME

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SUMMARY

I am a roboticist, and machine vision enthusiast. I am a fourth year electrical engineering student at Rochester Institute of Technology. I am currently seeking a Co-Op for Summer 2018.

WORK EXPERIENCE

MAY 2017 – DECEMBER 2017

D3 Engineering

Software Engineering Co-Op

Developed board support software and various device drivers for embedded advanced driver assistance systems. Prototyped various image processing pipelines using OpenCV. Designed and performed various tests to verify RTOS software functionality.

JANUARY 2017 – MAY 2017

Alstom Signaling

Train Signaling Engineering Co-Op

Responsible for writing installation and cut-over plans based off of electrical schematics for train control rooms in the Metropolitan Atlanta Rapid Transit Authority system.

SEPTEMBER 2016 – DECEMBER 2016

RIT Research Computing

Assistant Systems Administrator

Responsible for assisting in the upkeep of RIT research computing infrastructure. Helped design workflow for faculty and graduate research students using Torch, Caffe and Cuda.

EDUCATION

2015 – PRESENT **Rochester Institute of Technology**

B.S ELECTRICAL ENGINEERING; ROBOTICS
Computer Science House

2014 – 2015 **Cuyahoga Community College**

COMMUNITY COLLEGE
Physics Club

ROBOTICS PROJECTS

2017 **Kudos** (<http://www.trevorsherrard.com/html/Kudos.html>)

A differential drive robot making use of a distributed ROS architecture and an exploratory SLAM algorithm to map out unknown spaces.

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

Automatic tool identification for the computer science house woodshop.

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

My Computer Vision Robot Platform

COMPUTER VISION PROJECTS

2017 **RIT SPEX HAB Horizon Detection** (<http://www.trevorsherrard.com/html/ComputerVision.html>)

A CLI application using OpenCV to detect the earth's horizon in images taken from a high altitude balloon. This code ran on a Raspberry Pi at 60,000+ feet.

2016 **HAAR Training Tutorial Web Page** (http://www.trevorsherrard.com/html/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 **CSH Augmented Reality Logo** (<https://youtu.be/dx1Ek2E-DCk>)

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

PROFESSIONAL SKILLS

ADVANCED LEVEL C, C++, ROS, OpenCV, Python, SPI and I2C protocols

INTERMEDIATE LEVEL SLAM, Linux, LiDAR, Imaging Science, Embedded Linux

BASIC LEVEL Torch, Caffe, RTOS, Verilog, Verilog

RELEVANT COURSES

EE CLASSES Semiconductor Devices, Digital Systems I and II, Embedded Systems Design

ROBOTICS Robotics Systems, Advanced Programming