# 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

# Embedded Software Co-Op

Developed board support software and various device drivers for multicore embedded advanced driver assistance systems. Prototyped various image processing piplines 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 ENGINEER-

ING: ROBOTICS

Computer Science House

Cuyahoga Community Col-2014 - 2015

COMMUNITY COLLEGE

Physics Club

#### ROBOTICS PROJECTS

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.

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

RIT SPEX HAB Horizon Detection 2017 (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/dxlEk2E-DCk) An Augmented Reality project for the Computer Science House at RIT.

### PROFESSIONAL SKILLS

C, C++, ROS, OpenCV, ADVANCED LEVEL

Python, SPI and I2C

protocols

SLAM, LiDAR, Imaging INTERMEDIATE LEVEL

Science, Embedded

Linux, Git

Torch, Caffe, RTOS, BASIC LEVEL

LTFX, Verilog, mmWave

Radar

#### Relevant Courses

EE CLASSES Digital Systems I and II,

Embedded Systems Design

ROBOTICS Robotics Systems, Advanced

Programming