Trevor Sherrard

CONTACT ME

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www.trevorsherrard.com

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

JANUARY 2018 - PRESENT

R.I.T

ROS Software Architect

Responsible for creating a distributed software architecture using robot operating system for a multiagent intelligent material handling system grant project. Participated in gated reviews of implemented software.

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 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.

EDUCATION

2015 - PRESENT Rochester Institute of Technology

B.S ELECTRICAL ENGINEER-

ING: ROBOTICS

Computer Science House

2014 – 2015 Cuyahoga Community Col-

lege

COMMUNITY COLLEGE Physics Club

ROBOTICS PROJECTS

2018 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

2018 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.

2017 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.

TECHNICAL SKILLS

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

Python, SPI and I2C

protocols

INTERMEDIATE LEVEL SLAM, LiDAR, Imaging

Science, Embedded

Linux, Git

BASIC LEVEL Torch, Caffe, RTOS,

LTFX, Verilog, mmWave

Radar

RELEVANT COURSES

ELECTRICAL ENG. Digital Systems I and II,

Embedded Systems Design

ROBOTICS Robotics Systems,

Advanced Programming