Trevor Sherrard

Contact Me

+1 (440) 799-2705
tws4129@rit.edu
github.com/sherrardtr4129
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 multi-agent 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 Engineering; Robotics
Computer Science House

2014 – 2015 **Cuyahoga Community College**
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.

Professional 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, LaTeX, Verilog, mmWave Radar

Relevant Courses

Electrical Eng.	Digital Systems I and II, Embedded Systems Design
Robotics	Robotics Systems, Advanced Programming