**Adam Driscoll**

|  |
| --- |
| joseph.adam.driscoll@gmail.com ∙ (781) 724-5442 ∙ www.linkedin.com/in/adam-driscoll/ |

EDUCATION

**Carnegie Mellon University, School of Computer Science** Pittsburgh, PA

Master of Science in Robotic Systems Development, QPA 3.93/4.33 December 2018

Fall 2017 Selected Coursework: Machine Learning | Manipulation, Estimation, and Control

Spring 2018 Selected Coursework: Robot Autonomy | Computer Vision | SLAM

**Worcester Polytechnic Institute** Worcester, MA

Bachelor of Science in Robotics Engineering May 2012

ACADEMIC PROJECTS

**GroundsBot,** [www.groundsbot.com](http://www.groundsbot.com) Carnegie Mellon University

*Software Developer* September 2017 – May 2018

* Designing an autonomous field robot capable of mowing the rough grass at a golf course with no additional infrastructure necessary
* Fusing data from a stereo camera, RTK GPS, IMU, and encoders using C++ to create a robust perception and localization subsystems
* Created GPS waypoint following and acceleration smoothing algorithms used in the navigation subsystem of GroundsBot

**Computer Vision Course** Carnegie Mellon University

* Implemented the Hough transform algorithm in Matlab to detect and outline object boundaries in a variety of images
* Implemented a Bag of Words classifier using convolution and K-means clustering to extract features and KNN to classify an image into 1 of 8 categories. Achieved ~50% (expected value on the assignment) accuracy on the provided image set

**Autonomous Wheelchair** Northeastern University

*Research Assistant* February – May 2017

* Programmed an autonomous wheelchair to transport elderly people from a nursing home to the Northeastern campus
* Researched existing SLAM algorithms to determine best algorithm for application, ultimately implementing the Cartographer system using ROS

**Autonomous Mapping Robot** Worcester Polytechnic Institute

*Software Developer* March – April 2011

* Developed mobile robot using Java to autonomously map and navigate a small hallway with static obstacle avoidance
* Utilized a combination of ultrasonic sensors and encoders to localize, perceive, and map environment

PROFESSIONAL EXPERIENCE

**Amazon Robotics** North Reading, MA

*Operational Stability Engineer*July 2015 – February 2017

*Field Service Engineer*February 2013 – July 2015

* Developed over 20 automation tools to replace manual task execution and reduce system failures
* Led more than 100 high severity calls with general and regional directors to resolve critical software issues
* Provided technical guidance to 120 zones across 36 Amazon Fulfilment centers to identify and resolve operational challenges
* Analyzed over 200 complex software issues to identify root causes

*Project: Support Scripts Package*

* Managed a suite of Bash scripts designed to automate common support tasks to increase efficiency
* Developed new features and scripts to optimize and build upon current features
* Collaborated with development teams to identify bugs and implement new features
* Promoted optimal hardware functionality by providing clients with on-site and remote technical services
* Troubleshot errors on all hardware components of the Amazon Robotics solution using a combination of MySQL queries and internally developed hardware testing tools

*Project: Commercial Client Health Dashboard*

* Created a set of MySQL queries to collect data from 29 commercial client facilities
* Aggregated and presented this data in a user friendly, graphical format using internally developed tools to allow maintenance teams to efficiently analyze warehouse status

SKILLS

**Programming Languages:** Python, C++, Matlab, Bash, MySQL, Java, C

**Frameworks and Operating Systems:** Linux (Ubuntu, Red Hat), ROS, Git