Adam Driscoll

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

EDUCATION

Carnegie Mellon Institute, School of Computer Science — Pittsburgh, PA
Master of Science in Robotic Systems Development — December 2018
Fall 2017 Selected Coursework: Machine Learning | Manipulation, Estimation, and Control
Spring 2018 Selected Coursework: Robot Autonomy | Computer Vision | Robot Localization and Mapping

Worcester Polytechnic Institute — Worcester, MA
Bachelor of Science in Robotics Engineering — May 2012

ACADEMIC PROJECTS

GroundsBot, www.groundsbot.com — Carnegie Mellon University
Computer Vision Lead — September 2017 – May 2018

- Developing 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 to create a robust perception and localization subsystems
- Implementing online machine learning algorithms to classify the different types of grass on a golf course

Autonomous Wheelchair — Northeastern University
Volunteer Research Assistant — February – May 2017

- Assisted in developing an autonomous wheelchair with the goal of transporting an elderly person from their nursing home to the Northeastern campus
- Researched existing SLAM algorithms to determine best algorithm for application, ultimately implementing the Cartographer system using ROS
- Integrated an IMU filter to stabilize and remove noise from IMU

Autonomous Mapping Robot — Worcester Polytechnic Institute
Software Developer — March – April 2011

- Developed mobile robot to autonomously map and navigate a small hallway
- 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

- 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

Project: Pod Crash Investigation

- Investigated and troubleshot numerous reports of drive units (robots) crashing into each other to determine root cause using MySQL and various internally developed tools
- Communicated with operational teams to reinforce proper training to prevent further crashes
- Identified major bug in the robot movement software and collaborated with development team to resolve it

Field Service Engineer — February 2013 – July 2015

- 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
- Analyzed common hardware errors across all clients and developed new procedures to correct and minimize these errors

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
- Trained a replacement to use these tools and build upon the dashboard created prior to team transition

SKILLS

Programming Languages: Python, C++, Bash, MySQL, Java, C
Frameworks and Operating Systems: Linux (Ubuntu, Red Hat), ROS, Git