Robert W Werthman II

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Professional Goal

Software developer interested in developing software for autonomous vehicles and working towards making driving safer.

Relevant Skills

- 1 year educational experience with C++. 1 year professional experience with C. Some experience with Python and Matlab.
- Currently enrolled in a Robot Vision class at University of Michigan, Dearborn. The final project will involve the Robot Operating System and using Matlab to control a Turtlebot robot to move to an object.
- Taken 3 master level classes covering machine learning, artificial intelligence, and data mining.
- 1 year professional experience with version control (git), issue tracking (Jira), peer code reviews (gerrit), automated builds (jenkins), and test-driven development.
- Experience with working on many different teams with many different types of people..

Experience

Software Developer, *11/2017 to Current - Continental Automotive Systems*
- Implemented vehicle diagnostics like data identifiers and diagnostic trouble codes in C with CAN communication on a dual core Arm processor for a car radio application.
- Collaborated with other developers in Germany, Mexico, Romania, and France.
- Worked with Vector CANoe, CAN stack, and flash bootloader.
- Used gerrit/git for code reviews and Jenkins for continuous integration.

Police Officer, *01/2017 to 08/2017 - Northglenn Police Department*
- Worked independently and as a team to handle calls for service and make quick decisions to resolve sometimes dangerous situations to ensure the community remained safe.
- Used Javascript, HTML, CSS to create a web application to help new recruits learn the streets and businesses of the city of Northglenn.

Edge Operations Apprentice, *09/2015 to 12/2016 - Google, Inc.*
- Worked together with other members of a global team to keep Linux based servers handling large amounts of internet traffic up and running correctly by analyzing machine logs, graphs of network traffic, and handling trouble tickets from customers.
- Used Python to improve a command line tool to automate handling of hardware related trouble tickets.
- Used C++ to create a command line tool to query a database for information about a server, process that information, and put it into a form system administrators could use to troubleshoot changes to network traffic to that server.

Software Engineering Intern, *06/2015 to 08/2015 - Mentor Graphics, Inc.*
- Collaborated with senior members of an Agile development team to design/develop Java client/server authentication using digital signatures and Public Key Infrastructure.

Indirect Fire Infantryman, *08/2007 to 03/2012 - 2nd Battalion, 75th Ranger Regiment, United States Army*
- Developed leadership skills as the leader of a two man team mortar team that provided fire support for Special Operation missions in Afghanistan and Iraq.

Favorite Personal Projects

Northglenn Geography Program
- Interactive web browser program built with Javascript, CSS, HTML, Node.js, and Google Maps Javascript API to help someone learn the streets and landmarks of the City of Northglenn. User visually sees streets or landmarks on a map and must input the correct name for each. This was a public project, but I moved it to a private repository.

Open Source/Community Projects

StreetSafe
- Participated in a Code for Boulder hackathon to build a web application that helps those who are homeless find resources like shelter, meals, and transportation given a location. Initial prototype was built with Angular, Node.js, and MongoDB. I'm no longer a contributor, but it is now known as UpSwyng *https://upswyng.org*

Education

- M.S., Computer Engineering, University of Michigan Dearborn, Expected 2021
- M.S., Computer Science, University of Colorado Boulder, 2016
- B.S., Computer Science, University of Colorado Boulder, 2016