Emily Daitch
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Education

B.S. in Computer Engineering - Georgia Tech (GT) 3.42 with High Honors   May 2017

Skills

Software: C++/C, Python, MATLAB, Docker, Terminal Commands (Linux & Windows), HTML5/CSS3
SDLC: Jenkins, git, Code Collaborator (Code Reviewing), Agile Methodology
Electrical / Mechanical: AutoCAD, 3D Printing, Soldering, Wiring
Communication: Technical Writing, Data Presentation, Public Speaking
Tools and Libraries: Git, TDD, Jenkins, Qt Widgets and signal/slots, openCV, opengl, boost
Robotic: PID control, Sensor payload programming, Computer Vision application plugins

Work History

John Deere **SWE Development Program** (3x 8 month rotations)   *July 2018 to Current*

Electronics Engineering Group, Sprayers - Des Moines Works Factory   3rd Rotation, Ankeny IA
● Refactored C++ applications to use the new AUTOSAR (AUTomotive Open System ARchitecture) framework
● Developed MBSD (Model Based System Design) components in Simulink, supporting the transition to AUTOSAR
● Aligned with the architect and integrator to ensure payload success
● Created a python script consolidating 30 sets of MBSD test results. Discovered and patched missing test coverage.

Section Control - John Deere Intelligent Solutions Group (ISG)   2nd Rotation, Urbandale IA
● Lead developer of the Manual Overlap Control App to provide more accurate yield data to Harvesters
● Contributed production software from Presentation layer (gui) down to Communication layer
● Interfaced with the UX and Customer teams to ensure compliance with branding and customer expectations.
● Regularly contributed to root-causing and solving system defects
● Extensive use of Qt Widgets and signal/slots

Automation Delivery Organization - ISG   1st Rotation, Urbandale IA
● Learned Docker on the job to containerize a legacy test environment, setting the stage for cloud deployment
● Refactored 20+ Jenkinsfiles in response to the changed system.
● Participated in a pilot program as a liaison for my team. The pilot program studied different simulation software available to be contracted for future R&D. Specifically, we explored these options with creating simulated training data for machine learning in mind.

John Deere **Product Engineering Intern** - John Deere - Cary, NC   *May 2016 to July 2016*
● Accelerated log analysis by automating detection of faulty signals using CAPL (CAN Application Programming Language)
● Worked with Vector CANalyzer to solve engine-controller defects
● Earned machine operator certificate in order to test machine behavior with various controller payloads

John Deere **Software Engineering Intern** - ISG - Urbandale, IA   *May 2015 to July 2015*
● Built HIL (hardware-in-the-loop) pipe to inject images from a software simulation into proprietary camera hardware in order to drive a vision based guidance application
● Gained experience with boost, Qt, and OpenCV libraries

Undergraduate Research Assistant - GT Low Frequency Radio Lab   *March 2014 to June 2015*
● Prototyped a portable radio receiver to combat phase instability in the field
● Developed on BeagleBone Black Programmable Real-Time Units and Digilent FGPA
● Best Research Presentation Award 2016 and 2017

Leadership

Rainbow Employee Resource Group - Urbandale, IA and Cary, NC   *2016 Internship - Present*
● Presented Educational LGBT material at many D&I educational events
● Organized resume review session with LGBT University of NC students