

STEVEN DIRTH

Software Engineer

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Git

C/C++

C#/.NET

Azure

Java

Angular

EDUCATION

2017 – 2021

Bachelor's Degree in Software Engineering

Iowa State University

Dean's List Fall 2017 | Spring 2018
3.0 GPA

WORK EXPERIENCE

May – Aug 2019

Software Developer Intern – Data Science & Informatics

Corteva Agriscience

- .NET, .NET Core, EntityFramework Core
- Azure (Azure SignalR, Azure Functions, Azure Storage)
- Angular
- Azure DevOps (build / deploy / version control)

May – Aug 2018

Test Department Intern

Sears Seating

- Worked with Excel VBA and Qt's ActiveX framework
- NI cRIO for partial test automation and logging

2016 – 2017

Summer Intern

Monsanto Company

I worked for Monsanto during the summer of 2016 and 2017. This included leading groups of employees in field work and collecting data.

PROJECTS

2017 –

Asteroid

Cardinal Space Mining

A cross platform desktop application written in C++ using the Qt and boost frameworks. The application acts as a control panel for CSM's robots

2017 – 2018

Pavonis

Cardinal Space Mining

The main robot control software which runs on a Xilinx MicroZed. The software is written in C++ using the boost libraries and is cross compiled for the MicroZed. Many improvements were made this year, but the most important was the distributed sensing protocol which allows the addition or removal of sensors without requiring any code changes to this project.

2018 – 2019

Marineris

Cardinal Space Mining

The main robot control software which runs on a Xilinx MicroZed. A major improvement this year was to the motor communication, as we were able to get sensor feedback from the motor controllers.

2017

Development Server

Cardinal Space Mining

I set up and maintain an Ubuntu server which hosts a GitLab runner for continuous integration and unit tests, as well as provides a way for new members to compile code without installing a virtual machine or full blown linux on their personal devices.

ACTIVITIES

2019 –

Controls Project Director

2017 –

Developer

2016 – 2017

Member

2016 – 2017

Developer

2016 – 2017

Co-Captain

2014 – 2017

Developer

HONORS

Cardinal Space Mining ISU Dean's List
Cardinal Space Mining ISU Dean's List
National Honor Society Eagle Scout
FIRST Robotics Competition
FIRST Tech Challenge
FIRST Tech Challenge

Spring 2018

Fall 2017

July 2016