Laila Hashi

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TECHNOLOGIES

Languages

C++ • RobotC • HTML/CSS • Java • Microcode Studio

Tools

AutoCAD • SolidWorks • 3D Printing • MATLAB • TraxMaker

EDUCATION

University of Waterloo

BASc Mechatronics Engineering
2017 – 2022

Relevant Courses

Data Structures and Algorithms • Circuits • Introduction to C++

AWARDS

First in EMAAN Awards
DECA MVP on written proposal

ACTIVITIES

Best Buddies
Model UN
DECA
Fed Prov

SKILLS

C++/RobotC:
- Well versed in object oriented programming using C++
- Proficient knowledge in basic data structures & algorithms implementing various algorithms in C++

Electrical Schematic:
- Demonstrated through constructing circuit boards using TraxMaker

Soldering Skills:
-Applied through the careful assembly of PCB boards used in the Sumo and Firefighter bot projects

Electronic Components:
-Strong understanding of electronic components such as capacitors, resistors, transistors, infrared sensors, voltage regulators etc.

Quick Learner:
-Demonstrated through creating projects with time constraints, which requires quick thinking and adaptability to meet deadlines

PROJECTS

FireFighter Bot

- Robot that has the ability to navigate through a 4 room maze, detect a flame and blow it out
-Implemented navigational algorithms using microcode studio
- Incorporated various electronic systems during construction including: motors and sensory (line, wall, and flame)

Sumo Bot

- Constructed a working robot that has the ability to sense and push other robots out of a ring while remaining in the ring itself
- Interpreted schematics and designed PCB boards to incorporate various electronic sensors including line and robot detection

Plotter Bot

- Designed a robot with the ability to plot a word inputted by the user
- Programmed using C++ to produce a word file which contained vector coordinate systems for each letter of the alphabet
-Used RobotC to read and interpret the word file so that the letter could be plotted by the robot

Portfolio Website

- Created portfolio website using HTML and CSS
- Designed to highlight skills and projects created over the years

WORK EXPERIENCE

STEM Coordinator| MAC Enricht **July — Aug 2016**
- Organized enjoyable and challenging STEM workshops for children:
- Constructing robots using the EV3 Lego robotics kit
- Creating lava lamps using concepts of chemical reactions
- Building bridges with the knowledge of various different types of structures