Anoushka Pathak

Candidate for Honours Mechatronics Engineering

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SKILLS SUMMARY

- Programming languages: C++, Python, Javascript, SQL, PHP, HTML+CSS
- Graphics and Design: AutoCAD, Solidworks
- Tools: PgAdmin, Atom, XCode, Matlab, MS Office

EXPERIENCE

Programmer and Computer Support - Environment Canada AQRD................. Jan - Apr 2019
- Built, updated, debugged web tools for data analysis and record entry
- Gained experience working with databases (PGSQL), creating dynamic websites, using php scripts
- Tool 1: Created a web form through which users could search for items and update/create logs, involved dynamic input using javascript
- Tool 2: Updated a data plotter to pull data from database using php scripts
- Tool 3: File uploading system to upload large data files into a database using python scripts

FIRST robotics team (2702 Rebels)... Jan - Apr 2018
- Built and assembled components of the mainframe/structure of the robot in a machine shop.
- Worked in a team to develop ideas on how the robot would lift itself and a large weight approx. 7ft upward.

PROJECTS

Mechatronics robots.. Sept - Dec 2018
- Designed and built a robot that creates a Jenga tower:
  - Used RobotC to program the robot to transport blocks, raise platform to correct height, place blocks, and check for failures using sensors
  - Used Lego, Tetrix kits and various materials to build the components of the robot and used active troubleshooting to refine the design
- Designed and built a robotic arm that lifted and placed small items on hooks and shelves with accuracy and precision using Tetrix kits and pneumatics.

Personal projects.. Sept 2018
- Created and published a personal website using HTML and CSS to learn and develop web designing skills
- Created simple user input based games/programs such as Battleship, Madlibs, and a RGB to HEX convertor using python

EDUCATION

Mechatronics Engineering.. Sept 2018 - 2023
- Data Structures and Algorithms
- Digital Computation (C++, RobotC)
- Engineering Graphic and Design (AutoCAD, SolidWorks, orthographic projection, GD&T)