Rutvik Sheth

Computer Engineering

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EDUCATION

Bachelors of Computer Engineering
McMaster University

09/2017 – 04/2022

- Engineering Computation: Iteration in python: Grade B+
- Logic Design: Combinational and Sequential circuits, Quartus II, Altera Boards. Analog and digital design fundamentals.
- Electrical Circuits: Designing circuits using OrCAD software and on paper

EXPERIENCE

McMaster Rocketry Team
McMaster University

06/2018 – Present *Hamilton, Ontario*

- Researched various types of launch rails for our Sounding Rocket independently.
- Analyzed and selected best nosecone for a rocket reaching speeds of Mach 0.7 to Mach 1.4. Von Karman Ogive was inputted.
- Designed the rocket's air-frame and nosecone on AutoDesk Inventor 2017

MAC Formula Electric
McMaster University

11/2017 – 04/2018 *Hamilton, Canada*

- Learning Failure Mode Effect Analysis for Motor Cooling System.
- Developed strong co-operative skills as well as self-directing skills.
- Designed Radiator, Pump, Pump bracket, Energy meter casing models on SolidWorks

Mentor/Judge
Mathstronauts - McMaster

01/2018 – 01/2018

- Mentored a team of 6 middle school students to educate the use of wind turbines.
- Explained various concepts and methods which helped them create a prototype with high efficiency.
- Latter evaluated several other teams to award the best prototype.
- Communicated with the team easily and effectively

Robotics - First Robotics Competion
J. Clarke Richardson Collegiate

09/2015 – 06/2017 *Ajax, Canada*

- Improved leadership and problem-solving skills by leading the Mechanical team of 3
- Developed excellent communication skills by independently securing Lear Corporation sponsorship of $3000 and mentorship
- Refined my attention to detail by controlling the robot and delivered game-winning performance in the arena
- Lead school robotics team (#5076) to become a finalist in district level competition at Victoria Park event.

SOFT SKILLS

Self-Directed | Dedicated | Quick Learner | Curious | Responsible | Co-operative | Passionate | Leader | Adaptable | Enthusiastic | Creative | Organization | Dependable | Accountable

PROJECTS

Face Identification (09/2018 – Present)
- Learning OpenCV through facial identification program, as well as gaining experience working with cascades, pip, and pillow while keeping a thorough record of each milestone.

Impact Project (09/2017 – 12/2017)
- Design a device for Cerebral Palsy patient to enable her the independence she desires and make her day to day activity easier.
- Achieved a grade of 90%

EXPERTISE

Python
Learned various types of libraries such as datetime, os, shutil and more. Additionally, create a facial identification software with basic machine learning algorithms.

Java
Created programs in eclipse and netbeans, using classes in same packages and or classes in different packages, encapsulation, and more. Currently learning new concepts and fundamental algorithms

C/C++
Learning to use new libraries and efficiently implementing distinct algorithms in a program.

HTML
With basic understanding and research, I created my personal website using downloaded template from Bootstrap. Later, I implemented interesting features for more presentable look.

Matlab
For math assignments, I use Matlab to create mathematical algorithms to solve complex problems which involve Laplace or Eulers equations. Currently, expanding my understanding of simulations and testing in Matlab

Inventor
Continuously designing new complex parts for cars, sounding rockets and personal use. Also, tested simulation software provided by Inventor to simulate a geared prosthetic palm.

Solidworks
Similar to Inventor, I have created many parts according to specifications.

Microsoft Office
Excellent proficiency in Word, PowerPoint, Excel, Publisher, OneNote

Programmable Logic Controller
Attended a workshop held by Grantek, where I learned the fundamentals of creating programs.

INTERESTS

Cricket | Pool | Badminton | Books | Table Tennis | Music | Photography | Trilingual