Zayed Umer

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Professional Profile

A dedicated engineering student seeking an internship/co-op position in a growth-oriented, innovative environment. Currently enrolled in Engineering One at McMaster University, graduated high school with 4.0 GPA.

Education

B. ENG. | STUDENT (2022- PRESENT) | MCMASTER UNIVERSITY

Awards

- 2022 Valedictorian Award Winner, Albert Campbell CI
- 2022 A.B Patterson Award Winner, Albert Campbell CI
- 2022 Recipient of Engineering Award of Excellence Scholarship
- Grade 9, 10, 11 and 12 Hons Student
- WHIMS Worker Hazardous Information Systems Online Training , TDSB

Core Professional Competencies

- Proficient in HTML, CSS, Python, AutoCAD, and Java
- Leadership roles in Robotics club, Student Council, Athletic Council and Stock Market Club
- Strong communication, documentation, analytical, and optimization skills with keen attention to detail
- Expert understanding of materials characterization, and Laboratory Testing Method
- Familiarity with manufacturing processes and product development
- Proficient in MS Office Suite (Excel, Word, PowerPoint), and Google Docs

Project Experience

SUBJECT MATTER EXPERT | PROJECT ONE | SEP 2022- NOV 2022

- Applied deep understanding of the material structure and properties to deliver effective solutions.
- Designed and implemented a practical solution for a real-world problem, with consideration for technical, economic, and social implications.
- Actively participated in safety improvement initiatives, housekeeping, identifying and addressing potential hazards in the workplace to ensure a safe working environment for all, understanding of 5S
- Communicated effectively with stakeholders, including technical and non-technical audiences, through clear and concise presentations, reports, and discussions.
- Generated detailed work instructions and other required documentation, ensuring compliance with established procedures and standards

SOFTWARE DEVELOPER| PROJECT TWO| NOV 2022- DEC 2022

- Developed and implemented a software program utilizing Python to efficiently sort and manage medical materials.
- Designed a software program to control robotic arms, specifically for remote surgeries.
- Collaborated with a team to create a program for controlling robotic arms with potentiometer input, contributing to the success of the project.
- Maintained accurate documentation of experimental results and findings, utilizing tools such as spreadsheets and databases to organize and analyze data.

PROJECT LEAD (RESPONSIBLE FOR SOFTWARE AND MECHANICAL DESIGN) PROJECT THREE| JANUARY 2023- MARCH 2023

· Created a Python program that accurately identifies and classifies various properties of materials, contributing to increased efficiency in material analysis.
· Developed a program to efficiently sort and dispose of recycling, reducing waste and improving recycling rates.
· Designed a physical mechanism for disposing of waste using Autodesk Inventor, contributing to a more sustainable waste management system.
· 3D printed and physically implemented both the physical mechanism and program, ensuring the practicality and effectiveness of the designed solution.
· Collaborated with a team to implement fundamentals of systems design into the final program, resulting in a more comprehensive and robust solution.
· Implemented the use of ultrasonic and color sensors into the program, enabling the accurate detection and classification of materials.
· Prepared engineering drawings of designed parts using Autodesk Inventor, ensuring accurate and precise manufacturing of designed component
· Expert ability to assist the Manufacturing Engineering team with process improvement activities, identifying opportunities for optimization and implementing solutions to enhance production efficiency
· Ability to conduct welding consumable prototype testing and characterization to evaluate their performance and suitability for specific applications, contributing to the development of new welding products.

Experience

DATA CLEANING COORDINATOR | SPINAL CORD INJURY ONTARIO| JUN – AUG 2021

· Meticulously removed incorrect, corrupted, duplicate, or incomplete data in the donor database
· Performed data management using Raiser's Edge software

ELECTIONS CANVASS WORKER | FEDERAL ELECTIONS | OCT 2019

· Canvassed for local candidates covered the largest neighborhood assigned.
· Responsible for the diligent distribution of marketing materials
· Valued team member recognized for going above and beyond to support the team.

VOLUNTEER | ALBERT CAMPBELL CICOMPANY | NOV 2019

· Introduced future students on the open night to the enriched sciences curriculum
· Worked effectively as a part of a team to deliver a professional presentation