## KALPANA CHAWLA

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#### **Highlights of Qualifications**

- Excellent leadership and teamwork experience gained by working on multiple group projects to design & develop complex systems
- Strong communication, organization and time management skills gained through participation in extracurricular activities
- Perceptive analytical & problem-solving skills developed through coop work experience
- Significant ability to interpret mechanical design drawings from experience in engineering projects and academic work

#### Education

Bachelor of Engineering, Mechanical Engineering **2020 - 2024** McMaster University, Hamilton ON

- Enrolled in level 3 of the 4-year Mechanical Engineering co-op program
- Achieved a CGPA of 3.6 on a 4.0 scale

#### Experience

Mechanical Engineer Co-op May 2021 – Aug 2021 Engineered Equipment Group at Hatch, Mississauga ON

- Participated in the design aspects of custom equipment and new product development
- Executed finite element analysis on various components and systems, including thermal analysis of cooling system elements
- Designed improvements for various types of mechanical equipment & technologies to maximize productivity & reduce breakdowns
- Established a routine preventative maintenance schedule for mechanical equipment using a Computerized Maintenance Management System (CMMS) clearing backlogged issues and attaining preventative maintenance on machines at least twice a day

## Facilities Assistant Co-op

May 2022 - Aug 2022

Toronto Hydro Corporation, Toronto ON

- Assisted with data updating and analysis of building layouts and closed out drawing packages for mechanical and electrical systems
- Performed space audits and applied controls to ensure health & safety compliance
- Processed construction documentation and drawings and applied technical writing skills for maintenance work orders
- Completed a written report reflecting the facilities building's performance, energy conservation and areas for improvement
- Developed presentation skills by presenting the report during a department meeting
- Updated AutoCAD layouts and supporting layout requests for department meetings

# Extracurricular Activities

Student Rep. Mechanical Contractors Association Student Summit **Jan 2021** 

- Collaborated in a team of 8 students to analyze existing blueprints of the Public Library of Calgary
- Created a proposal of ideas to improve LEED certification & efficiency of the building
- Presented the proposal for mechanical contracting to a group of 70 students & 10 professionals

### **Projects**

Electric Skateboard

- Modelled skateboard, motor, batteries, and brackets using Autodesk Inventor
- Soldered circuit and built a functioning electric skateboard featuring regenerative braking

#### Skills

- WHMIS Certified
- Standard First Aid
- · Machine Shop trained
- Radiation Safety trained
- Milling, metal lathe, drill press
- 3D printing
- Soldering
- SolidWorks
- Autodesk Inventor