

# KALPANA CHAWLA

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## HIGHLIGHTS OF QUALIFICATIONS

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

## EDUCATION

**Bachelor of Engineering, Mechanical Engineering** **Class of 2019**  
McMaster University, Hamilton ON

- ♦ Enrolled in level 3 of the 4-year Mechanical Engineering co-op program
- ♦ Achieved cumulative grade-point average of 3.6 on a 4.0 scale

## EXPERIENCE

**Mechanical Engineer Co-op** **May – Aug 2017**  
Engineered Equipment Group at Hatch, Mississauga ON

- ♦ Participated in the design aspects of custom equipment and new product development
- ♦ Performed finite element analysis on various components and systems, including thermal analysis of cooling system elements
- ♦ Designed improvements for various types of mechanical equipment and technologies to maximize productivity and reduce breakdowns
- ♦ Developed 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 – Aug 2016**  
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** **Jan 2018**  
Mechanical Contractors Association Student Summit

- ♦ 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

**Student Member** **2015 – Present**  
Professional Engineers Ontario

**Student Member** **2015 - Present**  
Ontario Society of Professional Engineers

## PROJECTS

**Electric Skateboard** **May 2017**

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

## SKILLS

**Laboratory:**

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

**Software:**

- ♦ SolidWorks
- ♦ Autodesk Inventor
- ♦ MATLAB
- ♦ AutoCAD
- ♦ Python

**Other:**

- ♦ G-class Driver's License