# Shubham Gupta

# **Electrical Engineering Student**

A goal oriented, highly collaborative individual with a strong passion for IoT, Project Management and Renewable Energy.

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#### WORK EXPERIENCE

# **Asset & Transmission Management Intern**Ontario Power Generation Inc. (OPG)

05/2017 - 08/2018

Toronto, Ontario

Achievements/Tasks

- Consulted with multidisciplinary teams to improve gaps in outage spill reporting for 35 hydroelectric stations; resulted in a savings of \$300,000.
- Self initiated a VBA application to optimally schedule hydroelectric outages with respect to future river flows and water levels; increased unit capability factor by 98%.
- Designed informative hydroelectric outage spill model using PowerBI visualization and delegated actionable business insights to 9 asset teams across Ontario.
- Assisted with development of thermal stations' submission process on new business rules created by IESO; increased speed and accuracy from 1 hour to 4 minutes.
- Conducted a power grid contingency analysis on Nuclear station's 230 Kv transmission line to create situational awareness in an event of unit/line loss.
- Coordinated with Hydro ONE on transmission outages to minimize the impact on OPG's generation and revenue losses.
- Lead on two major projects (Outage Coordination, Functional Water Management) to streamline operational processes between distant teams within renewable generation.

# **Flight Sergeant** Royal Canadian Air Cadets

05/2014 - 08/2014

Ottawa, Ontario

Achievements/Tasks

- Leading flight commander and mentor to 100+ cadets.
- Utilized strong leadership skills to monitor training center and provide logistical support to 400+ members.
- Liaison with Officers to ensure cadets are trained to assume higher roles.
- Prepared lesson plans to teach drill routines, radar operations and fundamental of aviation to a class of 30 cadets.
- Received recognition letter from Commanding Officer.

## **EDUCATION**

# **Bachelor of Electrical Engineering**

McMaster University

09/2014 – 04/2019

Power Devices & Systems

- MicroProcessor Systems
- Electronic Devices/Circuits
- Digital Communications

Cumulative GPA 3.0/4.0

- Energy Systems & Mgmt
- Signals & Systems
- Intro to Control Systems
- Logic Design

# **SKILLS**



#### **PROJECTS**

Electrical Team Lead (09/2015 – 04/2016)

- Worked effectively on the electrical design of a Quad copter.
- Implemented brush less rotors, speed controllers (ESCs) and propellers.

## Microprocessor Systems (01/2016 - 04/2016)

- Programmed EsduinoXtreme a mircocontroller to convert an analog signal to digital.
- Utilized OrCAD PSpice and Matlab for testing and simulation.

#### Half-Wave Rectifier (03/2016)

- Successfully designed, simulated and built a functional rectifier using MOSFETs
- Utilized OrCAD PSpice, MapleSIm and Oscilloscope to test functionality.

#### Stock Portfolio Tracker (03/2018)

- Developed a VBA based application using open database connectivity (ODBC) to monitor real-time stock & fund changes.
- Implemented live charts to track personal portfolio movements and provide true performance on the go.

## **ACHIEVEMENTS**

Senior Fire Warden (05/2017)

Point of contact for supervising occupants in an evacuation of their office space during fire/emergency

#### Electric Vehicle Ambassador for OPG (02/2018)

Promoted electric vehicles to over 1,400 attendees at 2018 Canadian International Autoshow

#### INTERESTS

