### **RAHUL GUPTA** 1225, Rue Saint Marc, Montreal, QC, H3H 2E7 +1 514-572-2094; rahulgupta0767.rg4@gmail.com

#### **PROFILE:**

Graduate student pursuing Master's in Industrial Engineering specializing in RAMS engineering with proficient knowledge in the field of automotive and manufacturing field. Having Two years of experience in the Tool Design and Development department in Sheet metal industry located in India and One year of experience in Canada's major food production firm.

#### **EDUCATIONAL OUALIFICATION:**

## Master of Engineering: Industrial Engineering

Concordia University, Montreal, QC

#### **Bachelor of Engineering: Mechanical Engineering**

Mumbai University, Mumbai, MH Cumulative Grade Point Average: 8.23 / 10

**PROFESSIONAL EXPERIENCE:** 

### **ENGINEER-DESIGN AND DEVELOPMENT**

AT, PIANO PRESITEL MUMBAI **Role:** 

- Study and analyse the tool drawings received from tool Design Department, Decide the number of processes required for different tool parts, prepare bill of materials and make proper planning right from raw material to assembly line.
- Determine the modifications and improvements that can be made to improve tool life.
- Managing & Co-ordinating a team of 9 workers which helped me in exploring my leadership skills and to achieve on-time delivery of tool parts to respective departments.
- I got vital exposure of CNC, VMC and wire-cut programming during my probation period.
- Managing & scheduling Production Planning of tool parts using ERP software (Shop Plan). •

### **PRODUCTION SUPERVISOR**

At Tim Horton's, Place D'Armes, Montreal (1 year part-time)

- Responsible for satisfying demand on right time to achieve maximum customer satisfaction.
- Productivity improvement by implementing strategies to reduce wastage of foods and increased • availability by stringent WIP control and adopting JIT production strategy.
- Monitoring inventory regularly and biweekly procurement of material based on predictions of the • demand
- Carrying out proper sales data analysis for promotional products. •
- Quality control by sampling intermediate and final product. •

### **JAN 2019 - PRESENT**

AUG 2012 - AUG 2016

AUG 2016 - SEP 2018

**JAN 2019 - PRESENT** 

#### **SKILLS:** Software Skills: Arena Simulation (useful to simulate production lines and WIP), SolidWorks, ANSYS Workbench 15.0, AutoCAD, CPLEX, Microsoft Office CNC, VMC (vertical milling machining), WIRE-CUT Programming, C++ **Programing Skills:** basic **Personal Skills:** Leadership skills, team oriented, flexible in handling multiple works.

## **ACADEMIC PROJECTS:**

#### Design and fabrication of prototype of multipurpose machine;

JUN 2015 – JUN 2016

Paper Published in IJRET - International Journal of Research in Engineering & technology/ Vol. 3, Issue 05, March 2016 | e-ISSN: 2319-1163 | p-ISSN:2321-7308

- Projected was done in a group of 4 students.
- In any sheet metal industry Rolling, Cutting & Bending are the predominant operations & separate machines are required for each operation if these operations can be done on a single machine, it will make work quite easy & will also increase profitability & productivity.
- We designed a Prototype model of the machine in solid works and manufactured it which • successfully completed all these operations at a time.
- During the course of the project we dealt with the designing & manufacturing of components & • this project was our first exposure to industrial world

Skills used: Machine Design, Solid works, ANSYS, Manufacturing skills

#### Design, analysis and manufacturing of Formula Student Car; AUG 2014 - MAY 2015

- Ethan Racing (Student Formula India), Mumbai: (Team of 21 Members).
- I was a team member working under the subsystem-Steering.
- We as a team successfully designed, analyzed and manufactured a Formula-Student race Car for SAE Racing events and passed the virtual event securing 22<sup>nd</sup> position out of the 106 teams participating in the competition.

Skills Used: Machine design, SOLIDWORKS, ANSYS, Mechanical Vibrations, CNC machining, Team coordination.

### Design of helical gear on certain loading conditions;

- Depending upon the requirements provided to us, our task was to design the helical gear using design software and then simulating it using Ansys to check whether it can withstand the loading properly.
- learning exposure for me to understand the software and how to apply knowledge in real time application

Skills Used: Machine design, SOLIDWORKS, ANSYS.

### **Reliability Analysis for fleet of locomotives;**

Complete detailed failure analysis of different components of Diesel locomotives using FMEA and determining the cost of warranty to the manufacturer by using self-built reliability tools built in Microsoft excel based on the reliability goal set by the manufacturer.

### Value stream Mapping for tool development department;

- Applied lean concepts for improving the existing layout of the Piano Presitel company and suggesting the improvements.
- Successfully build the value stream map of the company using Microsoft visio software.
- Concepts used were based on calculating takt time, applying continuous flow to increase operator • utilization and reducing the waste, lead time and inventory turns.

## **SEP 2014 – NOV 2015**

# **SEP 2019 – DEC 2020**

JUL 2019 - AUG 2020

#### Arena simulation of pharmaceutical company(Cosmetica labs, Toronto); JAN 2019 – APR 2019

- Modelling project on Cosmetica labs warehouse to optimize the space utilization of the warehouse and reducing the lead time. By creating a simulation model and suggesting them the steps to undertake to increase productivity.
- It resulted in the overall system efficiency to improve by 25% and also lead time decreased by 16%.
- It was a good practical exposure to simulation software and learned how to apply it in real life cases.

#### **ACADEMIC CASE STUDIES:**

I gave a detailed technical presentation on different types of fuel cells and its applications and its economic feasibility in today's world and successfully submitted a case study report on it.

#### **ACADEMIC ACHIEVEMENTS:**

University Topper in the subject- Machine design

□ Certificate from SAE (Society of automotive engineers) for successfully participating in Ethan racing FS (formula student) competition

#### EXTRA CURRICULAR ACTIVITIES:

- Virtual Supra SAE-INDIA; Represent my College's first Student Formula1 car design and analysis report; <u>https://www.saeindia.org/news-events-2015/</u> Role as Technical team leader in steering sub system.
- VNPS MECHATRON, 1<sup>ST</sup> APRIL 2016; Successfully Participated in a national level project showcase with the project entitled" Design and Fabrication of prototype of multipurpose machine for sheet metal operations".
- Helped in organizing the events of SAE such as robotic events and other technical events during my two-year membership contract with SAE.

#### **CAREER OBJECTIVE:**

Self-motivated, Team oriented and flexible engineer seeking for a competitive and challenging environment to enhance my skills and knowledge to establish a career for myself.