Shakil Chowdhury

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# Summary

# Passionate mechanical engineer with 12 months of internship experience in the design, manufacturing, and construction industry with a keen ability to improve supply chain processes. Highly proficient with design software such as Siemens NX and SolidWorks, and manufacturing processes. Always seeking to optimize value by implementing my skills whilst striving to learn more.

# Languages

* **French – native level**
* **English – native level**

# Education

## mcgill university (September 2016 - December 2020)

* BEng Mechanical Engineering – Internship Program

## vANIER COLLEGE (September 2014 – May 2016)

* Pure and Applied Sciences

# Skills and Certifications

* Microsoft Office Suite (Excel, Project, PowerPoint, Word, Visio)
* CAD software such as Siemens NX, SolidWorks, AutoCAD
* Python, C++, C
* MATLAB
* Robotics and software such as Arduino and ABB RAPID
* Manufacturing processes
* Working well in a high-pressure environment
* Interacting and communicating effectively with individuals of all levels
* Lean manufacturing (Yellow Belt in 6 Sigma and Lean Manufacturing)
* Value Methodology Fundamentals 1 (VMF 1) Course
* Workplace Hazardous Materials Information System (WHMIS 2015) certification

# Highlights

* **Consulting with the city of Laval to propose a complete building envelope and HVAC system** for a municipal building to minimize and satisfy energy demands
* **Conceived and manufactured a head stabilizer for new Tesla-7 MRI machines** at the Montreal Neurological Hospital
* **Designed an industrial robotic system (ABB)** capable of performing metal cutting operations and reducing health hazards and manufacturing costs
* **Reduced costs by reducing down-time and delays in the construction industry** by enhancing activities that generate value and removing waste activities
* **Mentored a robotics team**, engineered, and built a robot (space rover)

# Work Experience

## industrial engineering | Groupe agf (May 2019 – August 2019)

* Investigated flaws in the supply chain and proposed a complete improvement plan to reduce waste and shipping delays using lean manufacturing tools
* Performed risk analysis for various improvement ideas using lean manufacturing methodologies
* Lead and supported process improvement projects in the production and shipping sectors
* Conducted brainstorming sessions with management teams and production employees
* Organized and lead Kaizen meetings
* Notetaking relevant and important points brought up during meetings
* Prepared engineering reports detailing the progress analysis for upper management
* Kept projects on track within the continuous improvement department
* Worked with individuals in all departments to achieve common goals

## Mechanical engineering | Alphacasting (May 2018 – December 2018)

* Managed a metal cutting industrial robot project worth $100 000
* Modelled robotic cell elements using Siemens NX
* Created simulation routines using ABB RAPID
* Met with clients to provide updates on R&D projects consisting of developing parts free of defects such as inclusions, shrinkage, porosity, cold shuts, etc.
* Updated databases and maintaining logbooks
* Designed and prepared parts for wax injection molding
* Prepared sample parts for non-destructive testing
* Analyzed microstructural elements such as dendrite arm spacing in aluminum alloys
* Conducted tests to determine a better slurry combination for shell molds for titanium alloys
* Evaluated temperatures with respect to time in a titanium casting machinery
* Managed process improvement projects in the plant
* Prepared and wrote work methods and instructions that could improve mold shell quality
* Trained and mentored employees to execute tasks in the robotic cell