

# REYES MOWERY

1385 Woodroffe Ave, Ottawa, ON | 613-727-4723 | reyesmowery@hotmail.com | linkedin.com/in/reyesmowery/

Performance driven **Mechanical Engineering Technologist** with 3+ years of experience specializing in designing and manufacturing mechanical components and systems for the renewable energy industry. Demonstrates the ability to utilize CAD systems to create quality parts, assemblies and prototypes. Works well in fast paced environments while adapting to multiple priorities and conflicting deadlines. Quick learner with strong organizational and communication skills.

## SUMMARY OF QUALIFICATIONS

- Skillfully prepares, interprets, and modifies mechanical, architectural, electrical, pneumatic and hydraulic drawings, models and schematics
- Successfully analyzes and solves complex mechanical problems by applying mathematics and fundamentals of engineering principles
- Creatively and accurately designs and analyzes mechanical components, processes and systems by applying fundamentals of mechanical engineering and material science
- Offers a sound understanding of programming, setting up, operating and troubleshooting manual, CNC, and 3D printing equipment
- Effectively plans, implements and evaluates projects by applying project management principles

## TECHNICAL PROFICIENCIES

<b>Design Software</b>	Solid Works, Solid Edge, AutoCAD
<b>Machining Software</b>	Mastercam, Gibbs Cam
<b>Computation Software</b>	Excel, MATLAB, LabVIEW
<b>Communication Software</b>	MS Word, MS Power Point

## EDUCATION

**Mechanical Engineering Technology Diploma** Apr 2016  
Algonquin College, Ottawa, ON

**Manufacturing Engineering Technician Diploma** Apr 2009  
Algonquin College, Ottawa ON

## PROFESSIONAL WORK EXPERIENCE

**Mechanical Engineering Technologist Research Assistant** Sept 2015 – Apr 2016  
Algonquin College, Ottawa, ON

*Collaborated with design team to create, produce and commission a 6-axis CNC milling center which could repeatedly produce a tolerance of  $\pm 20\mu\text{m}$  over the machines envelope, not exceeding a budget of \$100,000.00 within an eight month time frame.*

- Determined orientation, length and layout of axis utilizing engineering principles
- Differentiated, evaluated and selected motion control component based on design criteria and manufactures data sheets
- Utilized SolidWorks to produce and manipulate 3D model assemblies and test models for failure using Finite Element Analysis

# REYES MOWERY

1385 Woodroffe Ave, Ottawa, ON | 613-727-4723 | reyesmowery@hotmail.com | linkedin.com/in/reyesmowery/

## **Mechanical Engineering Technologist Research Assistant**

May – Aug 2015

Algonquin College, Ottawa, ON

*Appointed team leader of engineering team which designed, tested and commissioned a renewable thermal energy project with a deadline of 70 days, while surpassing the original expectation efficiency by a factor of 1.85 times.*

- Produced and tested theoretical models utilizing Solidworks
- Articulated research study results electronically, written and orally with industry partners, academic advisor and design team
- Produced mechanical drawings to aid in the manufacturing and assembly of components
- Assembled, tested and commissioned system in the field

## **Mechanical Engineering Technologist**

Oct 2010 – June 2011

Canadian Hydro Components Ltd., Almonte ON

*Mentored under the supervision of lead Mechanical Engineer in the design, testing and commissioning of renewable hydroelectric generating turbines.*

- Created, interpreted, and modified mechanical models and drawings in the aid of creating investment castings patterns utilizing Solid Works
- Produced 3D printed models of existing and proposed CNC milling and turning centers to aid in evaluation of retool limitation
- Designed, troubleshoot and manufactured fixtures, jigs and dies for retooling purposes utilizing CAD/CAM software

## **Machinist**

Feb 2006 – Feb 2008

Canadian Hydro Components Ltd., Almonte ON

*Apprenticed under the supervision of the Shop Forman in the manufacturing and assembling of renewable hydroelectric generating turbines.*

- Interpreted mechanical drawings, blueprints charts and tables
- Read, modified and generated NC programming language
- Configured and calculated appropriate feeds, cutting speeds, tooling, tooling/part offsets in first-operation to allow drawing specifications/tolerance to be met for manual and CNC machining centers
- Operated Oxygen/Acetylene, MIG and TIG welding equipment to create work holding, assembly components and prototyping purposes
- Performed quality control inspections utilizing measuring equipment to ensure specified tolerances were maintained

**REFERENCES AVAILABLE UPON REQUEST**