

Ricardo Hidalgo

CPI, Mechanical Engineering Graduate | rhidalgodr@gmail.com | 514-632-9243 | linkedin.com/in/ricardo-hidalgo-99a89223b

SUMMARY

Mechanical Engineering Graduate with **technical knowledge in mechanical, electrical and programming**. Excellent blend of technical, problem solving and leadership demonstrated throughout various jobs. **Native English, French and Spanish speaker**.

SKILLS

Solidworks • Fusion 360 • CATIA • Ansys • CFD • FEA • AutoCAD • Matlab • C++ • JS • Java • Python • HTML & CSS • SQL • VBA • Simulink & Simscape • Lean Manufacturing • 6 sigma • MS Office (Word, Excel, MS Project, PowerBI) • 3D-Printing • 3D-Scanning • Fluid dynamics

EDUCATION

CONCORDIA UNIVERSITY
BACHELOR OF MECHANICAL
ENGINEERING
2026

COLLÈGE ANDRÉ-GRASSET
PURE AND APPLIED SCIENCES
2021

CERTIFICATIONS

- Fundamentals of Biomedical Imaging (EdX)
- WHMIS for Laboratory Personnel
- Hazardous Waste Disposal for Laboratory Personnel
- Corrosive Substances Handling
- Salesforce Trailhead - Expeditioner rank (53 badges, 64012 pts)

EXTRA CURRICULARS

2023 - Space Concordia - Rocketry

PROJECTS

• Capstone Project - Low-Speed Water Tunnel

Designed a research grade Low-Speed Water Tunnel for fluid dynamics research for Concordia's Turbulence Research Lab. Manufactured a small scale model. Was responsible for CFD simulations, fluids system and design; heavily involved in FEA, CAD, manufacturing, etc.

• Automated Mobile Robot

Designed fully automated mobile robot that remains in zone, evades obstacles and chases targets using computer vision and C++

• 5-Bit Analog Circuit

Designed and built fully analog circuit using a 5-bit system to detect & display the BPM of the user using flip-flops, logic gates, etc.

EXPERIENCE

SENIOR ASSOCIATE, MECHANICAL DESIGN | JUBILANT RADIOPHARMA
2025 - Now | 1 year | Montreal, QC

Joined the Medical Devices R&D team as a Hardware Intern and progressed to project technical lead, supporting project leadership, conducted investigations, designing & executing testing protocols, and producing technical documentation.

- Took ownership of critical system and flow investigations. Identified root causes, operational constraints, presented findings & technical roadmaps to management and technical teams.
- Designed and built a fully custom test-bench, replicating a clinical-grade, high-complexity medical device. Engineered mechanical components, fluidics, circuitry, and software, to bypass constraints for R&D testing.
- Responsible for executing testing, flow characterization for a prototype, interpreting data, and leading technical discussions with the client to outline performance gaps, design flaws, and recommended corrective actions.
- Created documentation, technical reports, and work instructions for mechanical assemblies.
- Exposure to standards: ISO-13485, ISO-13849, ISO-14971, ISO-527, etc.

MECHANICAL DESIGNER | CPG
2024 - Now | Montreal, QC

Designed multiple custom automotive products with innovative solutions based on client's requests. Variety of products designed and satisfied customers.

- Designed projects on Fusion 360 from start to finish using DFM to deliver optimal designs. Designs were often multi-faceted assemblies.
- Performed stress analysis for applied, materials, fasteners, etc.
- Ensured adequate design was made while considering manufacturing, tolerances and machine limitations
- Prototyping designs and testing process to validate design concepts

PRODUCTION ENGINEERING INTERN | ABB
2024 | 4 months | Montreal, QC

Part of the continuous improvement team, reduced man hours up to 422 h/year, increased savings up to 33,760.00\$/year and increased production efficiency

- Analyzed mechanical and electrical schematics for optimal assembly by collaborating with production and engineering
- Supported production by preparing documentation, creating takt schedules, labeling components, tackling production troubleshooting, and resolved using an engineering-based approach.
- Developed projects such as automated KPI tracker for projects & tasks, data parser for sensor readings in testing units, standardized procedures, automated & optimized storage for reduced wasted time and more