

WILL BEATTIE

Mechanical Designer

✉ willjbeattie@gmail.com

📞 (416) 333-9947

📍 Collingwood, ON

🌐 [LinkedIn](#)

WORK EXPERIENCE

Senior Mechanical Designer

LMI Technologies

📅 2022 - July 2024

📍 Burnaby, BC

- Led cross-functional teams in the development of optical devices for 2D and 3D shape measurement, overseeing projects from concept into production
- Served as lead opto-mechanical designer within those teams
- Produced and executed plans for product development, validation and introduction to manufacturing
- Engaged with key customers and sales to refine details of product form and function

Mechanical Designer

LMI Technologies

📅 2018-2022

📍 Burnaby, BC

- Produced optical and mechanical designs for three new shape measurement devices (Gocator 2382, 2490, and 3520)
- Performed FEA analyses to estimate product performance under mechanical and thermal loads
- Conducted validation testing to ensure candidate designs met specs
- Resolved issues in production, including designing around part obsolescence, root-cause analysis of manufacturing failures, and diagnosing products RMAed from customer sites
- Created a suite of software tools for generating reports on product performance, manufacturing yield, and cycle time

Mechatronics Designer

Medavail Technologies

📅 2015 -2018

📍 Mississauga, ON

- Designed and validated electromechanical assemblies for autonomously dispensing pharmaceuticals
- Designed a new package identification module, reducing cost by 20% and cycle time by 30%
- Conducted the prototype build of a new robotic pharmacy design, diagnosing and resolving issues, and documenting the build process

Researcher

Multiscale Design Lab, UBC

📅 2010 -2013

📍 Vancouver, BC

- Designed, prototyped and tested a molded microfluidic filtration device for identifying and separating tumor cells from blood
- Automated the operation and analysis of experiments using fluidic controls, microcontroller systems and digital image processing
- Instructed *Measurement and Instrumentation*, a core 3rd year undergrad course, achieving a 4.7/5 quality score on a student survey

EDUCATION

M.A.Sc, Mechanical Engineering

University of British Columbia

📅 2010 - 2013

📍 Vancouver, BC

B. Sc. E, Engineering Physics

Queen's University

📅 2006- 2010

📍 Kingston, On

SKILLS

Design

- Optical systems
- Conventional machining
- Sheet metal
- Injection molding
- Rapid prototyping
- Microfluidic devices

CAD

- Solidworks (with PDM)

Simulation

- Solidworks Simulation
- Zemax
- COMSOL Multiphysics

Programming

- Python
- .NET (C#)

Communication

- Strong technical writing and presentation skills
- Drawings with GD&T under ASME Y14.5

CERTIFICATIONS

- P.Eng application submitted, approval pending