Calvin Brereton

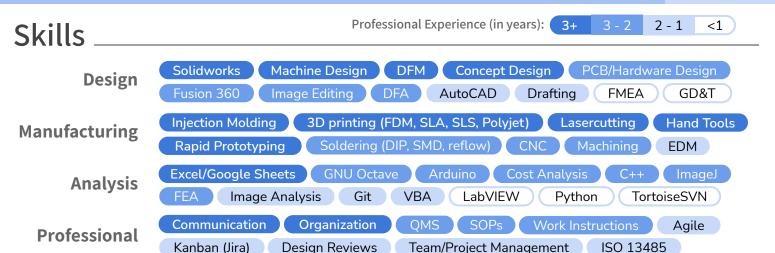
Mechanical Engineer

Currently based in: Kitchener, ON, Canada

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Work Experience

Mechanical Engineer & Hardware Team Lead | Amina Health Apr '20 (Kitchener, Ontario & San Francisco, California Oversaw all hardware-related tasks & operations Complete concept, prototype, & production design of novel cartridge + reader based vitamin measurement system Designed many electromechanical jigs for lab use, manufacturing, test/validation, & assembly Designed, produced, and tested dozens of optical system iterations, using various concepts & technologies to achieve increasing performance requirements May '17 Arranged and managed relationships with numerous suppliers & consultants (local & international) **New Products and Process Automation Specialist** | Christie Digital Inc. Aug '16 Kitchener, Ontario Lead development of new projector validation automation software written in LabVIEW May '16 Coordinated with & directed team members to meet project deadlines and client/stakeholder demands Directed rollout of test automation software, SVN, LabVIEW & LabVIEW best practices within department group Dec '15 **Product Developer Co-op** | Christie Digital Inc. Kitchener, Ontario Sep '15 Designed new projector hardware based on thermal, vibrational, and physical requirements to be 3D printed, injection molded, cast and/or machined for production Apr '15 Developed novel method of quantifying and reducing visible projected image vibration by ~80% Start-to-finish independent development of C++ application to assist laser projection cinema setup

Education

Jan '15

University of Waterloo

B. A. Sc. in Mechanical Engineering

Waterloo, ON

Sept. 2012 - May 2017

- Graduated with distinction
- Electives focused on:
 - Solid mechanics
 - Automation

_____ Projects

Designed, iterated on, injection molded, tested, and patented (US20190317115A1) a fully integrated, point of care ferritin blood test

Omitted: 3 engineering co-ops (Wilco Machine & Mold, Maclean Engineering, Cooke & Denison) + 1 retail job (Pet Valu)

- Designed, fabricated, and programmed a 'Magic Mirror' & a Planck keyboard as Christmas gifts
- Designed custom sensor mounts to optimize VR setup
- Designed & manufactured a custom chicken breast forming mold for a frozen food production line

Miscellaneous

Info available upon request

- Self-taught most software skills
- Interests are varied, but include:
 - Travel
 - VR & videogames
 - Hiking
 - o Music
- Conversational in French