

# Andrew Andrade

[andrew@andrewandrade.ca](mailto:andrew@andrewandrade.ca)

[github.com/mrandrewandrade](https://github.com/mrandrewandrade) · [mr.andrewandrade.com/cv](https://mr.andrewandrade.com/cv) · [hackster.io/mrandrewandrade](https://hackster.io/mrandrewandrade)

## Summary of Experience

- Extensive experience in manufacturing vendor management (ODMs, OEMs, CMs) and product validation.
- Worked on multiple manufacturing design challenges and proof of concept evaluations.
- Comprehensive rapid prototyping experience in benchtopping, machining, board creation, soldering etc.
- Passionate about new product development and product design (and required cost comparison modeling).
- Strong communication and contract negotiation skills in procurement, manufacturing, testing & distribution.
- Analytical skills using statistics, data-mining, operations research for managerial economic evaluations.

## Selected Professional Experience

**Facebook Inc.** — Manufacturing Engineering Intern

California, Prineville & China, Winter 2014

- Prototyped, tested, manufactured and deployed a custom designed test fixture, leading to a \$1.4 million hardware cost savings per factory and further reduced design by 8x after deploying in factories.
- Collaborated with American, European and Asian vendors to manufacture and assemble data center hardware.
- Lead quality and manufacturing of a new server line completing BOM revisions and manufacturing change orders.
- Prepared customer requirement documents and conducted assembly inspections at vendors & integrators.
- Drove quality issues and vendor rework management at Facebook's data centers around the world.
- Lead transportation testing including test monitoring, shake and vibration tests for new transportation systems.
- Audited factories in China from receiving, assembly, testing, QA, and packout/shipping areas.

**Imtex Membranes Corp.** — Mechanical Engineering Intern

Mississauga, Ontario, Winter 2012

- Integrated six sigma and lean methodologies (DMAIC and DFSS) for analytical engineering design and project feasibility.
- Designed and constructed bench scale apparatus and experiment setups in a manufacturing R&D environment.
- Collected and translated production trend data into improved standard operating procedure guidelines.

**Chrysler** — Manufacturing Summer Student

Brampton Assembly Plant, Summer 2011

- Diagnosed cost of poor quality issues by removing hidden factories, inherent waste and non-value added tasks.

**All-Type Machine Shop** — Mechanical Designer and CNC Programmer

Mississauga, Ontario, Summer 2010

- Designed machine tooling and plastics molds for automotive industry suppliers.

**Cantech Tool and Machine Shop** — Summer Machinist

Mississauga, Ontario, Summer 2009

- Mostly swept the floors, filed and polished parts but eventually worked my way up to operating manual machines.

## Selected Consulting Experience

**Militia Everyday Carry Co.** — Manufacturing and Industrial Design Consulting

Toronto, Summer 2014

- Lead new Titanium product line launch from industrial and product design to procurement (sourcing & manufacturing).

**Peraso Semiconductor Technologies** — Mechanical Manufacturing Lead,

Toronto, Fall 2013

- Industrial antenna product design, CAD modeling, customer specification drawings, manufacturing and validation.
- Built Peraso's supply chain from the ground up and created best practices, now used by company.
- Work lead to first product in the market antenna and was a major contributing factor to company raising \$8MM round.

## Patent

Waveguide adapter plate to facilitate accurate alignment of sectioned waveguide channel in microwave antenna assembly  
M. Fakharzadeh, **A. Andrade**, S. Jafarlou, B. Lynch, and M. Tazlauanu

Patent Pending

## Education

Candidate for BAsC in **Mechatronics Engineering**

University of Waterloo, 2011 – 2016 (expected)

- Option in **Management Sciences**, Focus: Operations Research, Supply Chain Management, Managerial Economics.

## Tools and Technology

**Design:** Solidworks, Unigraphics NX, MasterCAM, AutoCAD, Matlab, Simulink, MultiSim, Cadence/Allegro

**Programming:** C/C++, Python, R, Java, Tableau, Tibco, HTML5/CSS, SQL, Windows/Linux/Mac/Android

**Manufacturing** PCBa, SMT, CNC/Manual Mill, Lathe, Surface Grinder, MIG/TIG/ARC Welding, 3D Printing, Soldering

**Debug Tools:** Spectrum analyzer, Power meter, Oscilloscopes, Probes, Logic Analyzers, Microscopes, JTAG

**Testing:** GD&T (automated caliper), Six Sigma (DMAIC), DOE, DFT/DFM, ISO 9000, AOI / AXI / 5DX, ICT / BFT/IST/SAT