

Innovative PD/ME comfortable with large scope
Self-starter with a respectable Asian supplier rolodex
Efficient, relentless, and voracious appetite for learning

BROGAN MILLER
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EXPERIENCE:

AliveCor

Senior Mechanical Engineer

7.2018 – Present

Sensel

Senior Mechanical Engineer

4.2018 – 7.2018

Sensel's only ME since the company's inception.

DRI for mechanical, non-software/electrical quality, and manufacturing efforts for our high volume OEM business. Co-owned system level design with CEO. Responsible for scheduling and managing OEM engineering deliverables.

Designed production parts for machining, compression molding, injection molding, lamination, converting, magnets, packaging, conductive inks, multi-substrate stack-ups, screen printing, sheet thermoforming, cable manufacturing, and FATP. Working knowledge of die casting, stamping, soft goods, PCB (schematics, layout, fab, and SMT).

Created technical depth in haptics, vibration isolation/dampening, ultra thin designs, trackpad design and manufacturing, FEA (static, thermal), lamination, and rubbers.

9 design patents, 3 utility patents.

Mechanical Engineer

2.2016 – 4.2018

Took the Morph (a cutting edge pressure sensitive device) and the Overlays (swappable silicone rubber interfaces) from concept to market.

Owned 90% of the non-EE BOM of the Morph and 90% of the Overlays from design, quality, supply chain, supplier management, reliability, and manufacturing.

15 Asia visits (China with some Japan and Taiwan), 30+ FAIs, 40+ factory evaluations, tolerance stack-ups, intermediate GD&T, owned our BOMs and PLM (Arena), wrote 7 cosmetic specs and various reliability testing profiles.

Co-owned our CM relationship and handled quality, schedule, product cost structure, ECOs, and FATP instructions. Managed our ocean freight, and have developed a healthy hate for customs of every country.

Stanford School of Education, TLTL

Program Director / Designer

6.2013 – 7.2015

Designed 7 open-sourced educational tools (one of which Google bought!) and over 90 prototypes. Managed a digital fabrication lab of 150 people/year, sourced and maintained a multitude of capital equipment, and designed the space itself.

Taught over 150 students (ages 9-50, local, Russia, Thailand, and Mexico), started a user centered design internship for children in East Palo Alto, and developed a depth in educational tool design and Constructionist pedagogy.

StartX [Stanford Start-Up Accelerator]

Innovator in Residence

12.2012 – 6.2013

Earned a seat as an Innovator-In-Residence for an affordable open-source physics tool I designed. Project ended up piloting in 26 schools.

EDUCATION:

Stanford University, BS: Mechanical Engineering – Product Design

2013

Stanford Men's Water Polo - Division I Varsity Athlete

VOLUNTEER:

I have been given so much, and I have always felt a moral obligation to give back to the world. I have held ~10 coaching positions for swimming, water polo, Special Olympics, and basketball. Since my time in the Stanford School of Ed, I have volunteered with local schools setting up Maker Spaces, teaching students and teachers alike, and having a blast spending time with kids.