

# DANIEL FOURIE

danielfourie.net  
dan@danielfourie.net  
408 857 2478

## EDUCATION

**Massachusetts Institute of Technology**, GPA 4.9/5.0 Cambridge, MA  
Bachelors of Science in Mechanical Engineering concentrating in Product Design January 2012  
Relevant coursework: Precision Machine Design; Power Electronics; Product Design and Development; Product Engineering Process; Design and Manufacturing; Instrumentation; Thermal-Fluids; Controls; Elements of Mechanical Design

## EXPERIENCE

**Google Inc.** Mountain View, CA  
*Product Design Engineer, ChromeOS* April 2012 - Present

**Self-Employed Consulting** San Mateo, CA  
*Mechanical Engineering, Product Design/Architecture, Prototyping* 2009 - Present

- Clients: AVEC Scientific Design, Fogel Devices, Manta PD, Boost Ideas
- Input devices, medical devices, consumer products

**Apple Inc.** Cupertino, CA  
*Product Design Intern* May 2011 - August 2011

- Supported iMac team through the early stages of product architecture
- Redesigned a critical feature which yielded significant performance and cosmetic improvements
- Conducted design-guiding experiments and tolerance analyses, developed test fixtures, and assisted in prototyping

**Barrett Technology, Inc.** Cambridge, MA  
*Mechanical Engineering Intern* May 2010 - August 2010

- Invented an intuitively mapped remote control for a robotic hand as part of a three person team
- Created a miniature leadscrew-actuated gripper for a robotic finger
- Developed an in-house thermoforming process to manufacture a protective plastic cover

**Undergraduate Researcher**

- 3D printed prosthetics - Biomechatronics Group, Media Lab, MIT 2011
- Heart simulator - Precision Engineering Research Group, MIT 2010
- Shoe-mounted piezoelectric energy harvesting transducer - Liang Research Group, Texas A&M University 2009

## ACHIEVEMENTS and AWARDS

- Mobile Autonomous Systems Lab Competition, 1st place, 2011
- 2.007 Contest, 2<sup>nd</sup> place, Outstanding Design and Performance Award; International Design Competition, 2010
- Top Yo-yo Design, Manufacturing Class, 2010
- ARRL General Fund Scholarship, SEMA Top Student Award, 2010

## ADDITIONAL SKILLS

- Competent with Pro/E, NX, SolidWorks; working knowledge of Inventor, SketchUp, Eagle, ADINA, FEMM
- MIG, SMAW Welding, Machine shop
- Working knowledge of HTML, Python, L<sup>A</sup>T<sub>E</sub>X, MATLAB

## PUBLICATIONS

- Pat. Pend. 13/208,090. Pistol-grip for Intuitive Control of a Robotic or Virtual Hand. 8/11/2011
- Fourie, D. Shoe-Mounted PVDF Piezoelectric Transducer for Energy Harvesting, *MIT UG Research J.* **19**, 66-70, 2010

## ACTIVITIES

- MIT Varsity Lightweight Crew, 2008-2011
- MIT Electronic Research Society (MITERS)