

DAVID R. KIRKLAND

1344 Redcliffe Lane • Lincoln, CA • 95648
kirkland@alum.mit.edu • 617.642.5862
www.DavidKirklandEngineer.com

Education **Massachusetts Institute of Technology** Cambridge, MA
B.S. in Mechanical Engineering September 2004 – June 2008

- Humanities concentration in Spanish
- Relevant Coursework: Product Engineering Process, Design and Manufacturing, Toy Product Design, Mechanics and Materials, Dynamics and Controls, Thermal-Fluids Engineering

Experience **Product Studio Inc.** Champaign, IL
Lead Engineer and Designer November 2009 – January 2011

- Developed consumer goods for a variety of clients, including medical devices, sports equipment, and children's toys
- Managed in-house design team as well as external development
- Generated, evaluated, and prototyped mechanisms and components
- Brought a product from sketch through manufacturing in Hong Kong by working closely with the client, developing prototypes and CAD models, and overseas sourcing
- Created new manufacturing processes for pad printing, extruded foam coating and continuous foam extrusion

Macon and Associates Pawtucket, RI
Product Developer / Mechanical Engineer March 2009 – October 2009

- Developed toy prototypes as a consultant for Hasbro
- Provided engineering support for a materials specialist developing new products and manufacturing processes

Hasbro Pawtucket, RI
Project Engineer - Tech Development Team June 2008 – March 2009

- Managed projects by collaborating with Marketing, Design, Packaging, Quality, and Legal to develop innovative products and bring them to market on time and at cost
- Assessed feasibility of emerging technologies and generated toy concepts
- Brought products to market as a lead engineer and project manager – such as Dart Tag Capture the Flag Set, Dart Tag Deluxe Set, and G.I. Joe Ultimate Duke Action Figure
- Earned a patent for Hasbro's Nerf brand
- Developed toy concept prototypes in-house and also by managing vendors
- Won company wide "Ideas Fair" with team of four for a pneumatic, pedal powered dump truck

Massachusetts General Hospital Boston, MA
Research Assistant to Sara Lazar May 2007 – February 2008

- Performed various types of analyses for physiological and fMRI data
- Developed an iterative program to optimize certainty in a 32 subject study
- Differentiated the clinical use of Mindfulness Based Stress Reduction (MBSR) and Relaxation Response for stress reduction

Skills

Computer: Solidworks (CAD, Sim-FEA/Fluid/etc), Mastercam, Matlab, Mathcad, LabView, Simulink, Microsoft (Excel, PowerPoint, & Project), Visual Basic, Basic

Technical: Machining (lathe, milling, etc.), Rapid Prototyping, Mold making, simple electrical circuitry, MRI and MEG techniques

Language: Proficient in written and verbal Spanish

Activities

Student Teaching at MIT

- Toy Product Design: Mentor (Spring 2008), Lab Instructor (Spring 2009)
- Product Engineering Process: Lab Instructor (Fall 2009)

Leadership

- Coached High School Lacrosse (Spring/Summer 2009)
- MIT Varsity Gymnastics 2 years. Varsity Diving 1 year
- Fraternity Involvement Phi Delta Theta: Historian 2006 – 07, Athletics Chair 2007 – 08

Interests

- Neuroscience, Snowboarding, Technology, Biking, Product Design