

# DAVID R. KIRKLAND

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

**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