



Benjamin Reinhardt

reinhardt@alumni.caltech.edu

(513) 703-3332

www.benjaminreinhardt.com

SUMMARY

Innovation, Intensity and Tenacity aimed at bitland-atomland interfaces, spaceships, robots, and building things better

SKILLS

In rough order of experience:

MATLAB, control theory - (PID, filters, etc.), differential equations, linear algebra, duct tape, Mills/Lathes, simple circuit design, LaTeX, soldering, Arduino programming, HTML/CSS, SOLIDWORKS, 3D Printers, Rigid body dynamics

EDUCATION

M.Sc., PhD Candidate - Mechanical Engineering, CS minor 2010-Present
Cornell University

Graduate student in the Space Systems Design Studio creating new spacecraft actuators

BS. - Mechanical Engineering and History 2006-2010
Caltech

Learned a lot of math. Built a 15 foot wall of ice. Wrote a thesis about barrels.

EXPERIENCE

Graduate Student 2010-present
Space Systems Design Studio

Simulations, managing research assistants, building experiments, and writing papers.

Visiting Graduate Student 2012-2014
NASA Ames and JPL

- *Ames 2014:* Building an electromagnetic spacecraft actuator
- *Ames 2013:* Building a closed loop control system for a 6-DoF microgravity test bed
- *JPL 2012:* Experimentally measuring eddy-current forces and modeling how to use them for a closed-loop spacecraft controller

Teaching Assistant 2011/2009
Cornell and Caltech

- *Cornell 2011* Heat Transfer - taught students how to use differential equations to show how cold things become hot
- *Caltech 2009:* Introduction to Mechanical Design - taught people how to design things that work and use machines to build them

Refrigeration and HVAC Technician 2008
BeamCo Contractors

Fixed air conditioners, refrigerators and plumbing