



Mark Cutler

Curriculum Vitae

Education

- 2012–2015 **PhD**, *Massachusetts Institute of Technology*, Cambridge, GPA – 4.7/5.0.
PhD in Mobile Robotics
- 2010–2012 **MS**, *Massachusetts Institute of Technology*, Cambridge, GPA – 4.7/5.0.
Masters in Aeronautical and Astronautical Engineering
- 2004– **BS**, *Brigham Young University*, Provo, UT, GPA – 3.99/4.0.
2005,2007– Bachelors in Mechanical Engineering
2010

Dissertation

- Title *Practical Robot Reinforcement Learning through Efficient Simulator Sampling*
- Advisor Jonathan P. How
- Description Designing efficient algorithms for decision making under uncertainty for autonomous systems. Efficiency comes by properly incorporating possibly inaccurate simulations of system to be controlled.

Masters Thesis

- Title *Design and Control of an Autonomous Variable-Pitch Quadrotor Helicopter*
- Advisor Jonathan P. How
- Description Designed, built, and programmed a novel autonomous multi-rotor helicopter capable of agile, aggressive, and aerobatic flight. Developed new flight control algorithms and autopilot hardware for the vehicle control.

Experience

Vocational

2010–2010 **Mechanical Design Engineer**, SPOTTERRF, Orem, UT.
Developed new heat management techniques for small radar devices

Detailed achievements:

- Learned how to make amazing coffee
- Finally determined the reason for PC LOAD LETTER:
 - Paper jam
 - Software issues:
 - Word not sending the correct data to printer
 - Windows trying to print in letter format
 - Coffee spilled inside printer
- Broke the office record for number of kitten pictures in cubicle

2010–2011 **Summer Intern**, LEHMAN BROTHERS, Los Angeles.
Rated "truly distinctive" for Analytical Skills and Teamwork.

Volunteer

2005–2007 **Volunteer Representative**, *The Church of Jesus Christ of Latter-day Saints*, Rostov, Russia.
Learned Russian through daily interaction with locals as a missionary. Provided leadership and training for 16 other missionaries, overseeing operations in a geographical area covering over 300 miles.

Awards

2011 School of Business Postgraduate Scholarship
2010 Top Achiever Award – Commerce

Computer skills

Basic HTML, CSS
Intermediate L^AT_EX, Linux
Advanced C/C++, PYTHON, MATLAB, ROS

Communication Skills

2010 Oral Presentation at the California Business Conference
2009 Poster at the Annual Business Conference in Oregon

Interests

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|---------------|--------------------|
| - My Kids | - Robots |
| - Electronics | - Racquet Sports |
| - Skiing | - Ultimate Frisbee |