

EDUCATION

PhD, Mechanical Engineering, Boston University	2017
Visiting Student, Stanford University	2016
MS, Mechanical Engineering, Boston University	2016
BS, Engineering, Harvey Mudd College	2010
Study Abroad, University of Western Australia	2009

HONORS & AWARDS

- Best Paper Finalist, International Conference on Robotics and Automation (ICRA) 2016
- Clare Boothe Luce Fellowship 2012 – 2014
- Dean's List & Graduated with Distinction, Harvey Mudd College 2007 – 2010
- Valedictorian, Steamboat Springs High School 2006

RESEARCH AND WORK EXPERIENCE

Research Scientist, CSAIL, MIT	Dec 2018 - Present
Postdoctoral Associate, CSAIL, MIT	Feb 2017 – Dec 2018

Supervisors: Prof. Daniela Rus, Prof. Sertac Karaman

- Working on the Parallel Autonomy project within the Toyota-CSAIL Joint Research Center
- Design control algorithms for autonomous vehicles interacting and cooperating with human drivers
- Hardware implementations on autonomous wheelchair and 1/10th scale race cars
- Further research details and full list of publications available on website

Research Assistant, Multi-Robot Systems Lab, Boston University & Stanford University	2012 – 2017
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Advisor: Prof. Mac Schwager

- Thesis: Analysis of multi-agent systems under varying degrees of trust, cooperation, and competition
- Design control algorithms for distributed nonlinear systems; implementations on quadrotors and ground robots

Flight Analysis of a Turning Pigeon, Harvey Mudd College	2008 – 2011
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- Rigorous kinematic analysis of pigeon's body movements through 90° turn
- Analysis demonstrated pigeons generate upstroke lift and turn similar to helicopters during flight

University of Iceland Global Clinic, Harvey Mudd College	2009 – 2010
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- Designed a small-scale system to generate electricity via "backyard waste heat reclamation"
- Worked with 3M to test Novec fluid for our waste heat reclamation system

Nike Clinic, Harvey Mudd College	2008
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- Designed shoes that are manufactured as independent parts and assembled at the retail level
- Focus on consumer customization, small-scale manufacturing processes and design feasibility

Cobham Graduate Development Program, Cobham, plc	2010 – 2012
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- Design Engineer and Program Manager at Carleton Technologies, Orchard Park, NY
- Design and Operations Engineer and Project Manager at DTC Communications, Nashua, NH

Software QA Engineer Intern, Laserfiche	2008
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SKILLS, MENTORING, and FUN FACTS

- Winner, MIT Postdoctoral Association Science Karaoke 2019
- Postdoctoral Affairs Visiting Committee Co-Chair, EECS, MIT 2019
- Undergraduate Research (UROP) Supervisor, Massachusetts Institute of Technology 2017 – Present
- Alumni Interviewer for Admissions, Harvey Mudd College 2012 – Present
- BU RISE Program Mentor, Boston University 2014
- Engineer-in-training (EIT) certified 2010
- Skilled in: Matlab, Python, ROS, Solidworks, AutoCAD, LaTeX, Office, Adobe CC
- Avid skier, SCUBA diver (80+ dives), and cyclist ∞