

Henry W. Love

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EDUCATION

Massachusetts Institute of Technology – B.S. Electrical Engineering – Cambridge, MA

Class of 2018

GPA: 4.7/5.0

- **Relevant coursework** – Power Electronics, Solid-State circuits, Microelectronic Devices and Circuits, Microcomputer Lab, Digital Electronics Lab, Analog Electronics Lab, Computation Structures

Yorktown High School – Arlington, VA

Class of 2014

GPA: 4.25/4.0

SKILLS

- **Electrical Engineering Lab Skills** – LTspice, Altium, PCB Layout, Soldering, Reflow, using oscilloscope, multi-meter, signal/function generator
- **Programming Experience** – Assembly, Verilog, Python, CSS, jQuery, Javascript, front-end web development, Arduino, Ruby on Rails, MATLAB
- **CAD Software** – Autodesk Inventor, Fusion 360
- **Markup Languages** – HTML, LaTeX

EXPERIENCE

- **Analog Devices Inc.** – June 2017 to present
Investigating solutions for permanent magnet synchronous motor (PMSM) control using field oriented control (FOC). Current controllers are not suitable for the motors in question.
- **MIT Lincoln Laboratory** – June 2016 to August 2016
High-speed PCB design. Design consideration included form factor, controlled impedance lines, and microstrip transmissions lines. Characterized frequency response of circuit using network analyzer and high-speed oscilloscope. Work included PCB fabrication.
- **Personal Engineering Projects**
High frequency resonant transformer (Tesla coil), Jacob's ladder, custom electric aluminum skateboard with Wii Nunchuk as controller (in progress), personal website, machining H-class rocket nozzle out of mild steel, aluminum foundry, aluminum Rubik's cube (in progress), medium-powered RGB laser driver
- **Small Scale Tutoring Service** – June 2013 to August 2015
Self-employed math tutor for students whose math abilities ranged from third grade mathematics to pre-calculus.
- **National Honors Society** – 2012 to 2014
Over 40 hours of volunteer work at Yorktown high school math lab, an afterschool program to assist those in need of extra help in math.

HONORS

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|---|---------------|
| • Northern Telecom Project Award | 2017 |
| Shared with my teammate for Digital Electronics Lab (6.111) final project: FPGA Beethoven | |
| • Intel International Science and Engineering Fair – Finalist | 2013 |
| • National Scholastics Art and Writing – Two time Gold Medal in Ceramics and Glass | 2011 and 2014 |

EXTRACURRICULARS

- **MIT Formula SAE Team** – August 2017 to present
New member of electrical sub-team
- **Music** – Private violin study from 1999 to present
 - MIT Emerson Fellow – 2016 to present
 - Emerson Program offers merit-based financial assistance for private lessons to MIT students of outstanding achievement on their instrument or voice in classical, jazz or world music via competitive auditions.
 - MIT Arts Scholar
 - Mission: To foster an active community of MIT students with an exceptional interest in the arts. The community's resultant role is that of an arts leadership group, cultivated through events and mentorship.
 - Teacher: Mr. Malcolm Lowe – Concertmaster of Boston Symphony Orchestra (BSO) – 2014 to 2015
 - MIT Chamber Music Society – 2014 to present
 - American Youth Philharmonic Orchestras – 2009 to 2014
 - Concertmaster of American Youth Philharmonic – 2013 to 2014
 - Meadowmount School of Music – 2012
 - Intensive seven week music camp with five hours of personal practice per day