Henry W. Love

Term Address
550 Memorial Drive
Cambridge, MA 02139

Permanent Address
4138 26th Rd. N.
Arlington, VA 22207

Phone: (703) 869-2022
Email: hlove@mit.edu
Website: www.bianchini-love.com

Education

Massachusetts Institute of Technology - Cambridge, MA
GPA: 4.8/5.0

- **M.Eng. Electrical Engineering** *Expected 2019*
  MIT 6-A Program with Analog Devices Inc.
- **B.S. Electrical Engineering, Minor in Music** *Class of 2018*
  Honors: HKN, MIT Arts Scholar
  Relevent Coursework: CMOS Analog and Mixed Signal Circuit Design, 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

Experience

Analog Devices Inc. - IC Design Engineer Intern *June 2018 to present*
Custom IC/analog design of a power-scaling, precision instrumentation amplifier using correlated double sampling. Amplifier is designed for applications with particularly low throughput. Project to become M.Eng. thesis.

Analog Devices Inc. - Applications Engineer Intern *June 2017 to August 2017*
Investigated solutions for permanent magnet synchronous motor (PMSM) control using field oriented control (FOC). Current controllers were not suitable for the motors in question.

MIT Lincoln Laboratory - Electrical Engineer Intern *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.

Honors

Member of MIT Eta Kappa Nu (HKN) *2018*
Eta Kappa Nu (HKN) is the national honor society for Electrical Engineering and Computer Science, with chapters across the world. The HKN chapter at MIT offers services to enhance the Course 6 community: these include the resume book, tutoring service, underground guide, and social events.

Northern Telecom/BNR Project Award: Best 6.111 Project *2017*
Shared with my teammate for Digital Electronics Lab (6.111) final project: FPGA Beethoven, a hardware based system that electronically plays an image of sheet music uploaded to an FPGA.

Intel International Science and Engineering Fair - Finalist *2013*
Shared with my teammate for our work on a low budget, high-frequency resonant transformer (Tesla Coil).

National Scholastics Art and Writing - Two time Gold Medal in Ceramics and Glass *2011 and 2014*

Extracurriculars

MIT Formula SAE Team - Electrical Subteam Member *July 2017 to June 2018*
Primary person responsible for redesigning the vehicle control unit (VCU) for the all electric MIT FSAE car. VCU was designed around an Arm Cortex-M3 microcontroller (`STM32F205RGT6`), a brand new MCU for the FSAE team that monitored faults and routed power/signals to peripheral circuitry on the car. My work included schematic design and PCB layout.

Music - Private violin study *1999 to present*

- **MIT Arts Scholar** *2016 to present*
  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.
- **MIT Chamber Music Society** *2014 to 2018*
- **MIT Emerson Fellow** *2016 to 2017*
  The 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.
- **Teacher: Mr. Malcolm Lowe** – Concertmaster of Boston Symphony Orchestra (BSO) *2014 to 2015*

Skills

Cadence Virtuoso ADE, LTspice, Altium, Soldering, Reflow, using oscilloscope, multi-meter, signal/fxn generator, Autodesk Inventor, Fusion 360, Assembly language, Verilog, Python, HTML, CSS, jQuery, Javascript, Arduino, Ruby on Rails, MATLAB, LaTeX