

# Frank Elsivan DuBose

dubose@college.harvard.edu  
(706)-818-3328 (C)

## Education

### HARVARD UNIVERSITY

Candidate in Engineering Sciences with focus in Electrical Engineering. 3.24 GPA  
Coursework includes design, computer science, calculus, psychology, writing, statistics

Cambridge, MA  
May 2017

### UNIVERSIDAD CARLOS III DE MADRID

Study abroad term; coursework includes materials science and industrial automation

Madrid, Spain  
Fall 2015

### ATHENS ACADEMY

President, National Honor Society Chapter; 4-year Member, Judiciary Board; Headmaster's Award

Athens, GA  
May 2013

## Technical Skills

### PCB Design

Experience designing PCBs in Eagle. Comfortable with major components of thoughtful board layout, familiar with ordering and fabrication process.

### Computer Science, Programming, Sequential Function Charts (SFC)

Ample practice and implementation of state diagrams, SFCs, and Ladder Logic. Other programming experience includes C, HTML, CSS, SQL, Matlab, STATA, Arduino, Unity Pro.

## Creative and Language Skills

### Creative Design

Extensive background in painting, drawing, photography, pottery, and 3D design. Portfolio available upon request.

### Spanish Proficiency

4 years of high school Spanish, 2 semesters of college Spanish, semester abroad in Spain, anticipated Spanish degree

## Engineering and Design Experience

### HOME AUDIO SYSTEM

Designer, Creator

Cambridge, MA & Madison, GA  
May 2016 – Present

Envisioned and constructed 100W/channel home audio system from scratch — stereo speakers, subwoofer, stereo amplifier, sub amplifier, and tone/volume/balance preamplifier. Designed or purchased then assembled PCBs, calculated heatsinking, designed and created linear power supply, built cabinets after modeling in Google Sketchup.

### Medical Device Design (ES-227) GAIT ANALYSIS DEVICE

Team Member

Cambridge, MA  
January 2016 – May 2016

Semester-long project drafting novel wearable device to monitoring tibial acceleration and angle during running. Interviewed physicians and researchers to determine relevant metrics to measure. Researched prior art in this field. Brainstormed areas for innovation. Divided work and collaborated with teammates 15+ hours each week.

### Joy of Electronics (ES-52) BICYCLE SAFETY SYSTEM

Team Member

Cambridge, MA  
April 2015 – May 2015

Overhauled a typical bicycle with group members by adding numerous devices aimed at safety and convenience. Components included a digital odometer, cascading turn signals, analog speedometer, and proximity sensor.

## Leadership Experience

### HARVARD SUMMER SCHOOL

Assistant Coordinator (2015), Proctor (2015, 2016)

Cambridge, MA  
Summer 2015, Summer 2016

As assistant coordinator, finalized logistics for 25+ field trips available to summer school students, trained proctors on how to chaperone trips each week, worked closely with supervisor. As proctor, lived on hall with 31 students, enforced disciplinary rules, served as trip leader and event organizer, collaborated with 13 co-proctors and dean.