

# Frank Elsivan DuBose

dubose@college.harvard.edu

(706)-818-3328 (C)

www.dubosethedesigner.com

---

## Education

### HARVARD UNIVERSITY

Degree Candidate in Electrical Engineering, Secondary Degree Candidate in Psychology

Relevant courses: Laboratory Electronics, Social Psychology, Expository Writing, Systems Programming

3.32 GPA

Cambridge, MA

May 2017

### UNIVERSIDAD CARLOS III DE MADRID

Study abroad term; coursework included Materials Science and Industrial Automation

Madrid, Spain

Fall 2015

### ATHENS ACADEMY

800 SAT Math, 730 SAT Verbal, 710 SAT Written, 35 ACT

Athens, GA

May 2013

---

## Research and Design Projects

### AUDIO SYSTEM: AMPLIFIERS AND SPEAKERS

Personal Research & Development Project

Cambridge, MA & Madison, GA

May 2016 – September 2016

Designed and fabricated entire 6-part home audio system with **no prior experience in audio equipment**

- Conducted 7 weeks of electronics/acoustics research before constructing 3 amplifiers and 3 speaker cabinets
- Designed circuitry, calculated power consumption, learned new software, planned physical layout
- Evaluated each amplifier piece-wise in electronics laboratory before assembly

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

Team Member (1 of 4)

Cambridge, MA

January 2016 – May 2016

Semester-long project prototyping novel wearable device to monitor acceleration and angle of tibia during running

- Researched prior art in commercial field and reverse-engineered currently available devices
- Worked with team for 15-25 hours each week on coding, scheduling, testing, presentations, and meetings
- Focused heavily on presentation style for weekly update meetings with teaching staff

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

Team Member (1 of 3)

Cambridge, MA

April 2015 – May 2015

Overhauled a typical bicycle by designing circuit-based odometer, turn signals, speedometer, and proximity sensor

- Brainstormed areas of college life that could effectively be improved with electronics (bicycles)
  - Considered all bicycle additions we could, then selected only the most practical and applicable options
  - Designed and built wheel rotation counter, speedometer, and odometer for group
- 

## Leadership Experience

### EXPRESSIONS DANCE CREW

Choreographer

Cambridge, MA

September 2016 – October 2016

Organized 4 hours of weekly rehearsal, choreographed for 6+ hours weekly, arranged show lighting and formations, tutored dancers who missed rehearsal, arranged social events for team bonding

### HARVARD SUMMER SCHOOL

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

Cambridge, MA

Summer 2015, Summer 2016

As proctor, supervised 30 students for the duration of the summer and worked closely with 13 co-proctors and dean.

As assistant coordinator, finalized logistics for 25+ trips available to students and trained proctors to lead trips

---

## Language, Technical, and Creative Skills

**Intermediate Spanish:** 4 years of high school Spanish, 2 semesters of college Spanish, semester abroad in Spain

**Laboratory Electronics:** Analog and digital, soldering, oscilloscopes, linear power supplies, AC and DC signals

**Programming:** Experience with C, HTML, CSS, SQL, Matlab, STATA, Unity Pro

**Creative Design:** Painting, drawing, photography, pottery, 3D design, woodworking