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EDUCATION

FRANKLIN W. OLIN COLLEGE OF ENGINEERING — **Needham, MA**
Electrical and Computer Engineering, BS Candidate — *May 2017*
GPA: 3.90

- Recipient of 4-year, 50% Olin Merit Scholarship
- Relevant Courses: Data Science, Materials Science, User-Oriented Collaborative Design, Signals and Systems, Fundamentals of Computer Science, Computer Architecture, Discrete Math, Gender and Film Initiative, Topics on Designing Software, Entrepreneurial Initiative, Real World Measurements, Linear Algebra, Software Design, Mechanics with Matlab Approach, Modeling and Simulation, Modeling and Control, and Media Revolution

ENGINEERING PROJECTS

Franklin W. Olin College of Engineering — **Needham, MA**
Student — *August 2013-Present*

- **CommCare Data Management –** Class Project, Data Science
  - Working with Dimagi, a company that delivers open and innovative technology to help underserved communities, on making data visualizations and analysis on their health management application
- **Basketball Wins Tracker –** Personal Software Project
  - Made my own API for tracking the number of wins of Basketball teams for a Fantasy Basketball League
- **FPGA Piano and CPU –** Class Project and Lab, Computer Architecture
  - ***FPGA Piano***: Programmed switches on a field-programmable gate array to correspond to keys on a piano that were generated by creating up-counters that divide the 25MHz clock speed of the FPGA to the specific frequencies of notes
  - ***CPU:*** Designed and created a multi-cycle CPU in Verilog that runs a recursive Fibonacci program, compiled using Assembly
- **Data Mining and Analysis** – Class Projects, Software Design
  - ***Academy Awards/Oscar Predictor***: Using Twitter's API to mine for tweets with words pertaining to Oscar Predictions, we performed sentiment analysis and accurately predicted who will win the Oscars with data visualizations
  - ***Image Recreation:*** Created an application that allows users to choose any picture and recreate the picture with any keyword they want (using Google Images' API and implementing an RGB formula)
- **Image Processing** – Class Project, Linearity
  - Researched, implemented and presented the Laplacian of Gaussian Approach to Image Processing
- **Modeling the Efficiency of Dialysis Machines** – Class Project, Modeling and Simulation
  - Modeled the effect of changing diffusivity and blood flow rates of dialysis machines for efficiency
  - Used Matlab software, learned and evaluated the performances about the biodesign of dialysis machines
- **Visible Women Cause** – Class Project, Media Revolution
  - Designed and created a website for a cause to support educating women in developing countries

EMPLOYMENT AND RESEARCH EXPERIENCE

Engineering Education Research, Olin College — **Needham, MA**
Student Researcher: Motivation in STEM Education — *September 2013 – Present*

- Using qualitative and quantitative data approaches, I work with Professor Yevgeniya Zastavker and Professor Jon Stolk to delve into the stories and emotional responses of students to understand student motivation in higher education STEM programs

Information Technology Department, Olin College — **Needham, MA**
IT Student Worker — *October 2013 – Present*

- Working at the Help Desk, where I fix hardware, software and other computer-related issues for Olin students and faculty

EXTRACURRICULAR ACTIVITIES

Filmmaking — **Needham, MA and San Jose, CA**
President and Founder of Olin's Filmmakers Unite Now (FUN) Club
Video Blogger and Film Editor for Olin College of Engineering — *January 2012 – Present*

- Make short films and documentaries for competitions, friends and fun
- Experience in stopmotion, cinematography, film editing and storyboarding for films

Adobe Technovation Challenge — **San Jose, CA**
Team Leader of Santa Teresa High School — *March 2013-April 2013*

- Led a group of women in the 10-week challenge to program an Android mobile application, business plan and pitch
- Programmed a prototype of an application that logged medical data for emergencies (SAMPLEme) to venture capitalists

COMPUTER PROGRAMMING LANGUAGES

- Python, Javascript, HTML, CSS, C, Matlab, Linux, Unix, LaTex, Photoshop, InDesign