

EDUCATION

New York, NY	New York University	Sep 2014 – Dec 2016
M.S. in <i>Electrical Engineering</i>		
<ul style="list-style-type: none"> • <u>Areas of Specialization</u>: Signal Processing, Machine Learning, Bioinstrumentation • <u>Graduate Coursework</u>: Data Structures and Algorithms, Probability and Stochastic Processes, Matrix theory • <u>Relevant Projects</u>: Keyboard Visualizer, EKG Bioinstrumentation Amplifier, Cell Fluid Volume Modeling 		
New Brunswick, NJ	Rutgers University	Sep 2010 – May 2014
B.S. in <i>Biomedical Engineering</i> , Minors: Mathematics/Psychology		
<ul style="list-style-type: none"> • <u>Undergraduate Coursework</u>: Probability theory, Linear Algebra, Tissue Engineering, Drug Delivery , Kinetics and Thermodynamics, Transport Phenomena 		

PROFESSIONAL AND RESEARCH EXPERIENCE

Researcher/Collaborator	Stanford University	Jan 2016 – Current
Stanford Crowd Research Collective		
<ul style="list-style-type: none"> • Working with Michael Bernstein to apply analytics and machine learning to Daemo, a self-governed crowdsourcing marketplace 		
Teaching Assistant	New York University	Sep 2015 – Dec 2015
<ul style="list-style-type: none"> • Course: EL 6303 Probability and Stochastic Processes 		
SoSC STEM Teaching Fellow	New York University	Jun 2015 – Nov 2015
<ul style="list-style-type: none"> • Contributed in the development and implementation of a STEM program involving electrical engineering, programming and wireless communication that impacted over 1000 students in the NYC area • Taught programming concepts using Arduino Unos and integrated technologies such as RFID and WIFI shields, parallax robot kits and IR/FT transmitters/receivers 		
Senior Design Project	Rutgers University	Sep 2013 – May 2014
<ul style="list-style-type: none"> • Collaborated with Dr. John K-J Li to develop a non-invasive monitor for hypertension • Created a MATLAB program to automatically calculate pulse transit time (PTT) from the ECG waveform by using a peak-detection algorithm 		
Research Assistant	Rutgers University	Jan 2012 – Dec 2012
<ul style="list-style-type: none"> • Created a GUI with MATLAB that modeled the dynamics of alcohol absorption in the body • Utilized ImageJ to record the number of live/dead/transfected cells using filters and edge detection 		

PROJECTS

Fun-thesizer (JavaScript, HTML5/CSS3)		
<ul style="list-style-type: none"> • Keyboard visualizer using the Web Audio API that can play/draw sounds with varying audio filters applied 		
Audio Effect Implementations (Python)		
<ul style="list-style-type: none"> • Implemented various effects (AM modulation, reverb, distortion) in python using the PyAudio library 		
EKG Bioinstrumentation Amplifier (MATLAB, LabVIEW)		
<ul style="list-style-type: none"> • Constructed an EKG using OP amps, DAQ hardware (USB-6009) and filtering done in MATLAB 		
Non-invasive Hypertension Monitor (MATLAB, Arduino)		
<ul style="list-style-type: none"> • Utilizes a pressure transducer in order to detect the pulse pressure in the radial and carotid arteries in order to determine arterial compliance 		

LANGUAGES AND TECHNOLOGIES

Programming Languages:	Python, SQL, Ruby, MATLAB, JavaScript
Web Technologies:	HTML5/CSS3, jQuery, Bootstrap
Software/Other:	Git/Github, Bash, Linux (Ubuntu), Sublime Text, Sqlite, Jupyter, Microsoft Office