

Richard Shen

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Github: <https://github.com/Souloist>

EDUCATION

NEW YORK UNIVERSITY, New York, NY

May 2016

M.S. in Electrical Engineering

- Concentration: Signal Processing and Bioinstrumentation
- Courses include data structures, algorithms, probability and matrix theory

RUTGERS UNIVERSITY, New Brunswick, NJ

May 2014

B.S. in Biomedical Engineering, Minors: Mathematics/Psychology

- Graduated Cum Laude

Honors: Dean's List

PROFESSIONAL AND RESEARCH EXPERIENCE

SoSC STEM Teaching Fellow

June 2015 – Current

K12 STEM Education, NYU School of Engineering

- 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 an Arduino Uno and integrated technologies such as RFID and WIFI shield, parallax robot kits and IR/FT transmitters/receivers

Adjunct Instructor

September 2014 – Current

Department of General Engineering, New York University

- Analyzed and returned feedback on technical reports related to electrical, mechanical and computer engineering
- Created a course outline and conducted weekly presentations for a class of 18 students

Senior Design Project

September 2013 – May 2014

Department of Biomedical Engineering, Rutgers University

- Collaborated with Dr. John K-J Li to develop a non-invasive monitor for assessing hypertension
- Applied vascular tonometry as a cost-efficient means of detecting pulse pressure in the radial and carotid arteries in order to determine arterial compliance
- Created a MATLAB program to automatically calculate pulse transit time (PTT) from the pulse wave and ECG transforms by using a peak-detection algorithm

Research Assistant

January 2012 – August 2013

Department of Biomedical Engineering, Rutgers University

- 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
- Presented to a panel of professors on a new model that quantified drug release from lipid implants

TECHNICAL SKILLS

**Programming Languages
Software/Other**

Python, JavaScript, HTML5/CSS3, Ruby, C/C++, MATLAB
Git/Github, Bash, Linux (Ubuntu), Arduino, LabVIEW, Microsoft Office