

Neil Weiss

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EDUCATION

- Columbia University**, New York, NY Sep 2015-May 2017
M.S. Biomedical Engineering GPA: 3.90
- Rutgers New Jersey Medical School**, Newark, NJ Sep 2013-May 2014
- Yeshiva University**, New York, NY Sep 2009-May 2013
B.A. Biology, Physics Minor GPA: 3.70

EXPERIENCE

- Research Associate**, *Laboratory for Intelligent Imaging and Neural Computing* Sep 2015-present
Columbia University
Principal Investigator: Dr. Paul Sajda
- Developing brain-computer interface in virtual reality as step toward real-world, consumer devices
 - Built multimodal brain-computer interface system combining inputs from EEG, eye tracking and video game
 - Adapted experiment's video game to virtual reality using Unity and Oculus Rift
 - Synchronized and processed data for machine learning classification
 - Investigated classification accuracy using various epoching and machine learning techniques
- Engineer and Head of Business Development**, *SenseAbility Labs*, New York, NY Oct 2014-Sep 2015
- Developed shoe insole that sensed and transmitted pressure maps with team of four engineers
 - Performed market research and prepared pitches for investors, winning \$6000 in prize money
 - Conducted need finding interviews in various fields including medicine, athletics and shipping
- Market Analyst**, *Actinium Pharmaceuticals*, New York, NY Sep 2014-Jun 2015
- Tracked clinical trial progress of competing developmental drugs for blood borne cancers
 - Presented reports directly to Senior Vice President of Finance and Corporate Development
- Private Tutor** Aug 2012-Jan 2015
- Tutored college students and graduates in General Physics, Calculus I, and GRE Math

PROJECTS

- Cardiac Pacemaker** Jan 2016-May 2016
- Designed and built cardiac pacemaker including sensing circuitry and stimulating circuitry
 - Programmed microcontroller to evaluate heart rhythms and determine when to administer shocks
 - Performed validation testing of functional requirements on live frog subject
- Sonocheck Software** Sep 2015-May 2016
- Developed application to error-check medical imaging orders together with team of three engineers
 - Performed market and IP research, interviewed customers including doctors and sonographers
 - Conducted validation testing with doctors interacting directly with software
- Robotic Arm Navigation** Sep 2015-Dec 2015
- Programmed a six joint robotic arm to navigate around obstacles in a three dimensional workspace

ACTIVITIES

- Club Hockey**, Columbia University, New York, NY Sep 2015-present
- Play center and right wing for the Columbia Lions club hockey team

SKILLS

Programming Languages: Matlab, Python, C# (moderate), Javascript (moderate)
Applications: Matlab, Unity