# Sophi Kravitz

## Electronic engineer. Hacker. New Media technologist

P: 917.806.6210 E: sophi@mix-engineering.com W: mix-engineering.com Recommendations: LinkedIn

## **Selected projects:**

2014: WobbleWonder (with team): added fans and virtual Segway into Oculus Rift experience.

~0.5A fan driver, basic analog design, prototype schematic only, Eagle, firmware in Arduino

2014: Breathalyzer circuit using MQ-3 alcohol sensor

~ Animation in Processing, firmware in Arduino

2013: Hacker in Residence at Sparkfun Electronics

~ EEG communication circuit using Neurosky. Bluetooth RN-42, Atmel 328, schematic /layout in Eagle, Arduino

2012: Cell phone signal detector knows when people in meeting are texting.

~Analog Devices chip, schematic/layout in Kicad

2012: Training mice and goldfish to swim through hoops

~Beam-break circuit using IR LEDs, schematic /layout in Eagle, firmware in Arduino

2011: Heartbeat Dome: participants feel their heartbeat outside their body via subwoofer speakers

Oximeter circuit, analog/digital design, Li-ion battery powered, schematic /layout in Eagle, firmware for PIC

2011: Radiation Orchestra plays music based on background radiation.

~Radiation detector, analog/digital design, schematic/layout in Eagle, firmware for PIC

## Engineer / owner, MIX-E, LLC October 2010 - present

#### **Selected Clients:**

Lead, The Hackaday Prize, Supplyframe, Pasadena, CA/ Multiple locations

The Hackaday Prize, logistics, creative, promotions. 2015.

Technical Advisor, Stone Brook Robotics, LLC, New York City, NY

Product design, selection and systems, general advising. 2014- present

Electronic Engineering consultant, Vicarious Visions/Activison, Albany, NY

Embedded systems project. Fall 2014

Electromechanical Engineering consultant, Ceres Technologies, Saugerties, NY

Applications, support for X-Ray fluorescence (XRF) systems. 2012- 2014

Director, BlueStamp Engineering, New York City, NY

Promoting engineering to high school students through presentations and conversation. 2014

Product Designer, National Institutes of Health (NIH), Bethesda, MD

Designed nosepoke system that will be placed in two labs. Delivered June 2013

#### **Skillset:**

PCB board design, Arduino, hacking electronics, Oculus Rift, Processing, sensors, AutoCAD, PLC, Eagle, Solar

#### **Education:**

Bachelor of Science in Electrical Engineering, State University at New Paltz, May 2006

Bachelor of Arts in English, State University at New Paltz, May 1998

Introduction to Photovoltaic Technology, BOCES in Port Ewen, May 2009

ITP at NYU, Summer program 2014