Gideon Grossman

Current Address:
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EDUCATION

Princeton University, Princeton NJ — June 2014
BSE Mechanical Engineering; GPA 3.41 (Cum Laude); Certificates in Sustainable Energy and Environmental Studies

The University of Melbourne, Melbourne Australia — February – June 2013

PROFESSIONAL SKILLS

Electrical Engineering: Component selection, PCB design, assembly & debugging, o-scope, DMM
Mechanical Engineering: DFM CAD, 3D printer operation & maintenance, laser cutting,
Software: Embedded C, Python, CSS, HTML, JS, PHP, SOLIDWORKS, EAGLE
Languages: Hebrew (fluent), Spanish

EXPERIENCE

Artifex RDE, Firmware Engineer, San Diego, CA — March 2017 – November 2018

- Wrote all firmware and software for the Bradford Pole, a million dollar art installation on UCSD's campus, including I2C, SPI, USART, PWM, RTDs, luminosity sensors, high power LEDs, data analysis scripts written in Python, remote SSH capability, live video-streaming and a secure dynamic webpage written in HTML, CSS & PHP. Debugged the high power LED circuits and assembled 800 feet of cabling.
- Wrote and tested all firmware for the Smart Cube, an app-enabled lock with accelerometer-based tamper detection, AES encryption, bidirectional motors and Bluetooth LE. Managed FCC certification, analyzed and reworked hardware, managed inventory of all prototypes and trained manufacturers at the factory

Noisybands Founder, Lead Engineer San Diego, CA — March 2016 – Present

- Designed, assembled and tested the hardware and mechanical design of a new toy
- Collaborated and negotiated costs with overseas manufacturers and suppliers.

Omniome. Mechanical Engineer, San Diego, CA — October 2016 – February 2017

- Wrote Python modules to automate a complex microfluidics system for a novel genomic analysis technology, including low level serial communication and high level UI graphics code
- Assembled electromechanical prototypes and tested for performance limitations

Velocitek Inc., Design Engineer, Paia, HI — April 2015 – February 2016

- Assembled, debugged and added a solar-charging circuit and other features to the hardware of an Olympic sailing compass
- Tested and revised C code on an AVR MCU to integrate magnetometer, accelerometer and gyroscope data and output compass heading
- Wrote Python code to validate the firmware calibration of motion-sensing IC components
- Coherently communicated design specifications to Chinese manufacturers and suppliers
- Collaborated with offsite industrial designers and engineers
- Rapidly modeled and prototyped waterproof mechanical housing, a custom button and locking mechanism
- Designed a solution to effectively absorb moisture inside of a water sports speedometer

Roboteam Ltd., Mechanical Engineer, Tel Aviv, Israel — November 2014 – March 2015

- Wrote comprehensive assembly instructions for two military-grade robots
- Designed and modeled plastic and metal electronics housing and adapter plates

Quirky.com Design Engineer Intern, New York, NY — June – August 2014

- Modeled and designed prototypes for innovative IoT products

Solar PV Nanotechnology Research, Bar Ilan University, Ramat Gan, Israel — June - August 2013

- Designed and tested metal oxide thin-film PV cells using pulsed laser deposition

Polymer Science REU Research, Case Western Reserve University, OH — June - August 2012

- Designed an eco-friendly algae/carbon-fiber composite to replace PVC in wind turbine blades