# Ethan Glassman

ethan.glassman@gmail.com https://github.com/efinkg 2000 Old Page Mill Palo Alto CA 94304 650 575 9193

## **Education**

**Expected Graduation May 2016** 

# Washington University MS/BS Joint Degree Program

Candidate, Master of Engineering in Robotics (Electrical Engineering Department) Candidate, Bachelor of Science Mechanical Engineering

Minors in Mechatronics/Robotics and Computer Science

## **Elon University Dual Degree Program**

Candidate, Bachelor of Science Engineering Physics Minors in Physics and Applied Mathematics

### **Experience**

# **Jupiter Research Foundation,** Lead Mechanical Engineering Intern

**Summer 2014** 

• Led project to integrate and deploy a 1-micron resolution optical microscope on the Liquid Robotics Waveglider marine robot platform.

# Liquid Robotics, Advanced Technologies Intern

**Summer 2013** 

• Designed parts using Solidworks, requisitioned components, manufactured parts in-house using a manual mill, and cast resin parts for a prototype of a new waveglider capability.

# Halcyon Molecular, Intern

**Summer 2011** 

• Maintained order, cleanliness, and stock of the machine shop and electronics lab.

#### Senior Design, 2 Axis Computer Controlled Solar Tracking System

**Fall 2014** 

• Built Arduino controller to align solar panels within 10 degrees of orthogonal to sun.

**FRC Mentoring:** *Helping students design and build 120lb sports-playing robots in 6 weeks* 

- Mechanical mentor, Team 3215, Team Prion, Greensboro NC
- 2011-2012
- Mechanical/CAD mentor Team 1329, Robo Rebels, St Louis MO

2013-Present

# **Personal Projects**

#### **CNC Retrofit**

• Replaced 1980s era computer hardware with LinuxCNC on a homebuilt computer, rewiring axis drivers to an interface board and writing configuration code.

#### **Robotic Coffeemaker**

- Assembled a prototype automatic French press using repurposed consumer electronics.
- Designed code and electronics to control by Raspberry Pi computer from the Internet.

#### **Skills**

- **Prototyping** Design, assembly, precision measurement, and testing
- Machining CNC or manual mill, manual lathe, sheet metal tools, rapid prototype.
- CAD Solidworks, HSMWorks, SolidEdge, Autodesk Inventor
- Coding Languages Python, Arduino, Java, MATLAB, Mathematica, LaTex.
- Computing Github, Linux, UNIX Terminal.
- Electronics Mathematic circuit analysis techniques, oscilloscope analysis, soldering.