SHANE KELLY

- ✉ shane.kelly@students.olin.edu
- 🌐 shanegerardkelly.com
- ☎ 512-934-4094
- 🐙 shanek21

Education

Franklin W. Olin
College of
Engineering
Robotics Engineering 2018

Skills

SOFTWARE
Python
Arduino C
Matlab
RobotC
Java
ROS
Linux
GitHub

ELECTRICAL
Microcontrollers
Signal Processing
Analog Circuit Design
Circuit Debugging

MECHANICAL
CAD
3D Printing
Basic Machine Shop Training

Other Passions

Beekeeping

Table tennis

Fencing (épée)

Bowling

Employment

Olin College of Engineering
3D Printing Student Teacher

Needham, MA
Aug 2014 to Current

I train other students to use 3D printing resources on campus and help to maintain/repair Olin's 3D printers.

Pharos Labs LLC
Software Development Intern

Boston, MA
May 2015 to Aug 2015

Used python to create basic applications for company research and worked on some data collection/analysis.

Reliable Appliance Repair
Engineering Design Consultant

Austin, TX
Jul 2015 to Dec 2015

Designed, CADed, and created technical drawings of new equipment that could be used in the field of in-home appliance installation.

Projects

MAHRI - Minimalist Approach to Human Robot Interaction

Working on a research project with the goal of making a robot that conveys emotion while using as few moving parts as possible.

Humanoid Robot 'Jimmy'

Implemented ROS, computer vision, and machine learning to add human-compatible interactions to a humanoid robot, including having Jimmy turn his head to track your face as you speak.

Interactive Wearable Vest

Worked on CAD, 3D printing of design iterations, and design/implementation of the electrical circuit for an interactive, wearable art piece, which visualizes body data of the wearer and their surroundings.

3D Scanner

Built and programmed a full 360 degree 3D scanner using an Arduino Uno, two servos, and an infrared distance sensor.

Patent Pending - 3D Printing

Currently patent pending for an apparatus that prevents moisture absorption in filaments during 3D printing and long-term storage.

Web Enabled Lighting

Created a system to control my room lighting from the web using Arduino and Raspberry Pi.

HubwayPredict Machine Learning

Used Python Sci-Kit Learn library to implement machine learning algorithms in order to predict future customer behavior in Hubway's public bike renting service.

Bowling Simulation

Created a 3D model in Matlab to find the optimal bowling ball throw. This model was then validated when we programmed the US Bowling Congress' bowling robot, EARL, with the same initial conditions as our model and compared the two trajectories.

Relevant Coursework

Principles of Engineering
Project-based integration of software, electrical, and mechanical systems.

Software Design
Python-based class focused on the real-world application of programming.

Modeling and Simulation
Analysis of physical systems and creation of accurate computer simulations in MATLAB.

Products and Markets
Creation of a product in an agile business environment and the pursuit of product-market fit.