SHANE KELLY

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Education

Franklin W. Olin College of Engineering
Robotics Engineering 2018

Skills

PROGRAMMING LANGUAGES

Python
Arduino C
Matlab
RobotC
Java

ADDITIONAL SOFTWARE SKILLS

ROS
Linux
GitHub

CAD EXPERIENCE

Autodesk Inventor (6 years)
SolidWorks (2 years)

Other Passions

Beekeeping

Table tennis

Fencing (épée)

Bowling

Employment

Olin College of Engineering — Needham, MA

3D Printing Student Teacher — 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 — Boston, MA

Software Development Intern — May 2015 to Aug 2015

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

Reliable Appliance Repair — Austin, TX

Engineering Design Consultant — 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

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.

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.

Patent Pending - 3D Printing

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

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.