### Will Zhang

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#### Skills

Familiar with Java and Python. Some experience with Android development, HTML/CSS/Javascript, Git, and R. Eager to learn other programming languages like C or C++.

### **Experience**

2016

### Hack Holyoke 2016 - Best Hardware Hack

- Designed with a partner a bike lock that could be unlocked by an Android phone
- Lock was controlled by an Arduino, which was connected to the phone via BLE
- See <a href="https://devpost.com/software/bike-lock">https://devpost.com/software/bike-lock</a> for more info

2016

#### Hack UMass 2016 - Devpost Staff Pick

- Designed with a partner a ball maze that would rotate along with another person's hand
- Maze was controlled by 2 servos, which were controlled by a Raspberry Pi. The Raspberry Pi read data from a Leap Motion sensor via internet.
- See https://devpost.com/software/mazemotion for more info

2014 - 2016

### Westborough High School App Club - Founder & President

- Founded App Club which met weekly to share and develop Android apps.
- Had a regular attendance of 10+ students including students without programming experience

2014

#### **Internet of Things Hackathon** - 2nd Place

- Designed a system that tracked the cold chain management of oysters
- Developed an Android app that could read the temperature of a sensor
- Sensors would be placed inside oyster crates and the temperature data would be sent to a smartphone via BLE.

2014

#### Harvard Sustainability Hackathon - 2nd Place

- Helped design a system that sought to reduce the carbon footprint caused by automobiles
- System involved ridesharing, an increase in the sales tax of gas, and an increase in public transportation funding
- Analyzed MA state driving data

#### **Side Projects**

- Programmed a Mandelbrot set plotter using Python
- Implemented the Needleman-Wunsch algorithm using Python for aligning 2 strands of DNA

- Developed a 15-puzzle solver using Java that utilized the A\* search algorithm (From Princeton University's Algorithms Part I course on Coursera)
- Simulated the percolation probability of a 2D square lattice using Monte Carlo methods (From Princeton University's Algorithms Part I course on Coursera)

# **Education**

2016 - PRESENT

# University of Massachusetts, Amherst - Computer Science, Statistics & Premed

• Currently enrolled in the Commonwealth Honors College and majoring in computer science, statistics, and following the premed track.

2012 - 2016

# Westborough High School, Westborough, MA

- Graduated in the top 10 of the class with a 4.96 GPA (3.76 unweighted)
- National AP Scholar, 2015 and 2016
- AP Computer Science Award
- 5 in AP Statistics, AP Computer Science, BC Calculus, AP Microeconomics, AP Physics 1