

# Joy He

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## WORK EXPERIENCE

### Draper Laboratory, Cambridge — *High School Intern*

July 2019 - Aug 2019

- Worked in a team of four, using Arduino, Solidworks, and Matlab to gather/analyze data to verify the feasibility of a hand-held MRI
- Design/analyzed a Halbach Cylinder
- Presented findings to multiple company departments

## EDUCATION

### Columbia University, BS — Computer Science

September 2020 - May 2024

Current Semester Courses: Multi for Engi/App Sci, Data Structures in Java, Accelerated Physics

Activities: Columbia Witness Webmaster, Christian Union Lumine, Intervarsity, EWB Ghana Tech Team

### Belmont High School, MA

September 2016 - May 2020

NHS scholarship recipient, Williams College Book Award, National AP Scholar with Distinction, 5x XC/T&F All-Star, New Balance Nationals Qualifier

## PROJECTS

### Climate Vulnerability Boston — *Personal, 2020 (Ongoing)*

Used Python, HTML, and public datasets to map clusters of street trees and color code Boston neighborhoods by population of socially vulnerable individuals.

### Charles River Bridges — *Personal, 2020*

Used Python, HTML, and data from Wikipedia page to map all the Charles River bridges with pictures.

### Mindset + — *Design @ CU, 2020*

6-week design sprint culminating in a prototype for a wellness/productivity app. Conducted user research/testing and prototyped in Figma.

## SKILLS

Applied Data Science +  
Data Visualization with  
Python

Arduino

MATLAB

Solidworks

Figma Prototyping/UX  
Design

## Relevant Coursework

Multivariable Calculus  
and Linear Algebra @  
Harvard Extension

AP CS A, BC Calc, Physics  
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