




Helena Abney-McPeck

h.abneymcp@gmail.com 

312-369-0751 

Chicago, USA 

## Education

A.B. in Computer Science with Honors  
(expected 2022)  
Harvard University  
2018-2022

College Coursework while in High School  
The University of Chicago  
2016-2018

Univ. of Chicago Laboratory High School  
2014-2018

## Coursework

### Computer Science

AP Computer Science  
Intro to Computer Science II  
Advanced Robotics Summer Program  
Computer Architecture  
Intro to Theoretical Computer Science  
Abstraction and Design in Computation

### Math

Honors Calculus I-II-III  
Abstract Linear Algebra  
Analysis in  $\mathbb{R}^n$  I  
Applied Linear Algebra and Big Data

### Statistics

Statistical Methods and Applications  
Intro to Probability

## Skills

Python, C, R, Java, Matlab, LaTeX, HTML,  
CSS, Git, Javascript, SVN, Arduino, OCaml

## Experience

The University of Chicago  
Center for Spatial Data Science  
Computation Institute Research Internship  
June-August 2018

- Project: "Spatial analysis of oral cancer incidence in Illinois" with Dr. Marynia Kolak
- Geo-spatial data mapping in R, excess risk calculation, health disparities analysis

The University of Chicago  
The Knowledge Lab/Computation Institute  
Summer Link Research Internship  
June-August 2017

- Project: "The effect of scientists' social networks on experimental findings: A case-study in psychology" with Dr. Valentin Danchev and Dr. Molly Lewis
- Constructed and analyzed social networks for a meta analysis
- Programmed in Python and performed statistical analyses

## Projects

- Programmed and built "search and rescue" robot that could navigate maze and retrieve specific objects (Python programming, computer vision)
- Programmed a computer system from the ground up: programmed logic gates, an assembler, a compiler, etc.
- Computer orchestra: designed and programmed digital instruments, composed, performed with ensemble