



## education

### ba | computer science and mathematics

hunter college |  
expected graduation:  
may 2021

- gpa: 4.0, 98 credits
- honors sage scholar
- dean's list
- ap scholar

stuyvesant high school |  
2018

## coursework

### computer science

Data Structures and Algorithms  
Software Analysis and Design I  
Software Analysis and Design II  
Software Analysis and Design III  
Open Source Software Development  
Computer Theory  
Computer Architecture I  
Computer Architecture II

### math

probability theory  
linear algebra  
mathematical analysis I  
discrete mathematics  
Calculus II  
Calculus III

### science

Intro. to Psychology  
Human Development  
General Chemistry II  
Electricity and Magnetism

## experience

### the web developer bootcamp | udemy

jul 2019 - sept 2019

- Participated in an online bootcamp covering web development principles and frameworks.
- Included tools and technologies like: Git, SQL, JavaScript, HTML, CSS, Node, Express, React, and PostgreSQL.
- Read and wrote complex queries to a database using PostgreSQL

### amc programming | hunter college

aug 2019 - present

- Participated in weekly programming practice in preparation for the International Collegiate Programming Contest (ICPC).
- Solved problems with topics including recursion, dynamic programming, graph traversal, backtracking, greedy algorithms, combinatorics, geometrical algorithms and network flow algorithms.

### innovation, entrepreneurship and the science of smart cities | nyu

summer 2017

- Participated in many class activities using SMART technology, including a program that monitors quality of water in a tank.
- Final team project: created a gas detector that sends text, lights LED, and sounds alarm when gas is detected; Arduinos, programming language C++, sensors, and SMART technology.

## projects

### lifesaber | qc hackattack | <https://devpost.com/software/lifesaber-lvog6m>

- First Time Hackers Winner, out of 300+ hackers
- Created a Chrome Extension that ranks the safety level of a neighborhood.
- Managed FBI data from NYC Open Data; Used Python, JavaScript, HTML, Bootstrap, Chrome Extension.

### route map | class project | <https://github.com/darrenzhang2000/routemap>

- Implemented two classes, City and RouteMap, with member functions using data structures like list, vector, stack
- Used recursive backtracking to determine if it a route is possible from origin city destination.

### asl on your side | lehman college hackathon

- Used HTML, Javascript, CSS and Bootstrap to create a website that markets our product.
- Used Python (Flask and Pillows) to convert words spoken to Alexa to images of American Sign Language
- Assisted team members with the backend; briefly introduced to Alexa Skills API.

## languages and technologies

- C++ (3+ yrs) , Python (3+ yrs) , HTML (2 yrs), CSS (2 yrs), Javascript (2 yrs)
- 1/2 year: Java, PostgreSQL, Python Flask, Bootstrap, NumPy, Pandas, Node, Express, React, Git, GitHub

