

**List of classes you take this semester:**

Multivariable Calculus (Phys./Engn. focus), Linear Algebra, Program Design with Data Structures and Algorithms, The Quran and its Readers

**List of science classes you took in previous years:**

High school:

Honors Biology, Honors Chemistry, Honors Physics, Advanced Topics in Physics, Computer Science I-IV, Engineering and Entrepreneurship I-IV

College:

Intro to Engineering: Design (equivalent to a physics class in statics and mechanics),  
Introduction to Object Oriented Programming and Computer Science

**Please specify programming languages and computational analysis skills, experience, knowledge and level (limited/fair/excellent):**

In high school, I took four semesters of computer science primarily taught in Java. We covered searches and sorts, key aspects of Object-Oriented Programming such as polymorphism, artificial intelligence algorithms such as mini-max, multithreading, and throwing errors and exceptions. In the final semester, we also spent time working in SQL managing and editing databases, first in the command line and then integrated into Java programs. Although an AP computer science class was not offered at my school, I took the AP Computer Science A test on my own and scored a 5. Outside of class, I was involved in the Website Development Club, where we worked on basic website development in HTML and CSS, with some minor Javascript functionality. At an internship, I used my HTML/CSS exposure to become familiar with WordPress and clean up the company website. In my engineering and entrepreneurship program, although not primarily a computer science course, we often used Arduino microprocessors, writing programs in the Arduino language (based on C/C++).

In university, at the end of the year, I will have finished the computer science introductory course sequence. The first in the sequence for me was focused on OOP, taught in Java. We covered the main tenets of OOP, used graphics and animation to make smoothly-running games, and learned how to use Git for version control and collaboration. The second course is on data structures and algorithms, focusing on how to structure and organize data, taught half in Java and half in Python. The course also focuses on testing and validation techniques, reinforcing OOP concepts, and understanding how different algorithms affect runtime and system resources. Outside of class, I attended workshop sessions and talks at the annual Hack@Brown hackathon, such as a workshop on web-scraping and Spotify integration with Python. This semester, I am also exploring the different computer science extracurricular opportunities, and I am particularly excited about the Quantum Computing Club!

**Main languages:** Java (excellent), Python (intermediate to proficient upon the completion of this semester)

**List of academic or other significant awards:**

National Merit Commended Student, AP Scholar with Honor, New York State Education Department 2021 Scholarship for Academic Excellence

**List of science journals you read:**

I enjoy reading science journals and attending research lectures here on campus so that I can participate in the research section of the community I belong to. Specifically, I enjoy reading the Brown Imagine Physics magazine, the Triple Helix, and attending computer science department lectures.

**Extra-curricular activities, interests and hobbies:**

Cellist and guitarist, Ultimate Frisbee, love to read!

**To which colleges or universities have you applied?**

**Which colleges or universities have you been accepted to?**

Currently enrolled in Brown University

**Which field of study do you intend to pursue in university?**

Computer Science, potentially also Applied Math or Astronomy