

# HARRISON SHAPIRO

---

4930 S Woodlawn Avenue, Chicago, IL | 773.892.9088 | hshapir@ucls.uchicago.edu

## SUMMARY

---

I am a high school student at the University of Chicago Laboratory High School, graduating in 2018, with interests in science, engineering, and technology. I am familiar with multiple programming languages and capable of teaching myself whatever is needed for a specific job. I am currently enrolled in the most advanced classes available at my grade level and maintain a 4.0 GPA. I am currently the Treasurer of our school's nationally-ranked Model UN team and manage over \$80,000 in expenses. I am also a member of the school's varsity Science, Cross Country, and Track and Field teams. Last summer, I worked as a research intern at the University of Chicago's Institute for Molecular Engineering, designing and building a microscale polymer stretching device from scratch.

## COMPUTER SKILLS

---

### Web Design

- HTML – Proficient in HTML, as well as integration with CSS and JavaScript. For an example of my work, see this project I did with one of my peers: <https://aaggarw99.github.io/trains/> (works best in Chrome).
- CSS – I know how to use CSS to design a smooth webpage from scratch. I can also implement CSS templates with content that is in HTML and JavaScript.

### Programming Languages

- Java – Proficient. I have studied Java in AP Computer Science and Computer Architecture. I can process datasets and have created a compiler, VM translator, and assembler in Java.
- JavaScript – Moderately proficient. I am able to use JavaScript alongside Java and CSS for web design and programs with Graphical User Interfaces.

### Office Programs

- Microsoft Office – I am highly capable with all Microsoft Office programs and Microsoft OneDrive for cooperation on projects.
- GitHub – I am familiar with using GitHub to cooperate with others on programming projects.

## EMPLOYMENT HISTORY

---

Summer 2016

Institute for Molecular Engineering, de Pablo Group

- Designed a microscale polymer stretching machine from scratch with a 10-micron stretching resolution, the ability to fit beneath a microscope, and perfect biaxial

symmetry. This required the use of Computer-Aided Design (CAD) software, 3-D printing, and microprocessor programming for controlling the device.

- Helped produce curriculum for an IME summer program for area high school students.

2016-Present

#### Carbonless Community/Energy Choices

- I work as the Head of IT Operations at Carbonless Community, a Chicago-based green energy nonprofit. I also do work for Energy Choices, P.C., an energy brokerage firm.
- I work on the development of on a reverse auction web application for energy auctions, which has been a huge boon for Energy Choices.
- I also have redesigned Energy Choices' website and do frequent web-related work for them and Carbonless Community.

## EXTRACURRICULAR ACTIVITIES

---

2015-Present

#### University High School Varsity Science Team, *6 Hours per Week*

- International Science Olympiad
  - Member of the Varsity team since I joined
  - Regularly place against teams from much larger public schools
    - Placed first in Hydrogeology and fifth in Geologic Mapping at the ISO regional competition
  - Middle School team coach
  - Built a primitive electric vehicle, without adult help, with a timer circuit stopping mechanism
    - This vehicle placed third in the ISO regional competition
- Worldwide Youth in Science and Engineering (WYSE)
  - Member of the Varsity team since I joined
  - 6<sup>th</sup> place in the state-level computer science competition

2014-Present

#### Model United Nations, *7 Hours per Week*

- Member since the beginning of Freshman year
- Treasurer and Executive Board member, April 2016 to present
  - I manage \$80,000 in expenses, including making travel reservations for large groups, directing the finances of our in-house conference, and working closely with the school administration.
  - I help create the rookie preparation and teaching strategy for what is widely recognized as one of the top three High School Model UN teams in the country.
- Attended eight conferences outside of Lab, winning awards at all eight
  - Best Delegate Awards (1<sup>st</sup> Place): Harvard MUN 2017, Vanderbilt University MUN 2016, North American Invitational MUN 2016, Southern United States MUN 2015, Lyons Township MUN 2015.
  - Outstanding Delegate Awards (2<sup>nd</sup> Place): University of Michigan MUN 2017, Princeton MUN 2016; Northwestern University MUN 2016, Princeton MUN 2015, Harvard MUN 2015.
- Worked as a crisis staffer at Lab's 2015 conference

2014-Present	<p>Varsity Track &amp; Field/Cross Country, <i>10 Hours per Week</i></p> <ul style="list-style-type: none"> <li>· Member since the beginning of freshman year</li> <li>· Varsity runner since fall of freshman year.</li> <li>· Fifth place at IHSA Cross Country Regionals freshman year. Second place at IHSA Track Sectionals in the 4x800m relay in 2015 and first place in 2016, qualifying for the State Finals in both years.</li> </ul>
--------------	---

---

## EDUCATION AND RELEVANT HIGH SCHOOL COURSEWORK

---

2004-2018	Student at the University of Chicago Laboratory Schools for Lower, Middle, and High School. Chicago, IL. Graduating in June, 2018. Unweighted GPA: 4.0/4.0
Mathematics Courses	Accelerated Advanced Algebra/Trigonometry (2013-2014): A; Discrete Math/Statistics (2014-2015): A; Advanced Precalculus/Calculus A (2015-2016): A; Calculus BC: A
Computer Science Courses	Introduction to Computer Science (2014-2015): A+; AP Computer Science A (2015-2016): A+; Computer Architecture: A+
Science Courses	Biology (2014-2015): A; Chemistry M (2015-2016): A+; AT Physics II (AP Physics C equivalent): A+