

# XI (CHELSEA) CHEN

[chxchen@mit.edu](mailto:chxchen@mit.edu) | <https://chxchenx.github.io/me/>

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## EDUCATION

### Massachusetts Institute of Technology

2019-2023 | Cambridge, MA

- > B.S. | Computer Science & Biology
- > Minor | Stats/Data Science, Design
- > GPA | 4.8 / 5.0

### Penn High School

2015-2019 | Mishawaka, IN

- > GPA: 4.459 / 4.0

## SKILLS

- > Coding languages: Python, Java, HTML/CSS, Javascript, React.js
- > Design: GIMP, Procreate, Adobe CC
- > Data analysis (Biopython, pandas, seaborn, pyplot, Excel)
- > Biochemical research

## AWARDS

### Whirlpool Sons & Daughters

#### Scholarship Recipient

2019-2023 | \$24,000 scholarship

### TSA TEAMS Competition State Champion & National Qualifier

2016-18 | national STEM competition

### MathCon National Runner-Up

2017 | national math competition

## EXPERIENCE

### Wave Learning Festival

Data Analyst | August 2020-present

- Analyzed student registration data, focusing on satisfaction with our course assignment process, and used this data to optimize algorithms for how students were assigned to classes.
- Analyzed socioeconomic data of school districts to help growth teams determine outreach direction.
- Conducted in-depth research into the popularity of different courses offered by the organization. Helped serve 1000+ students.

### Essigmann Lab, MIT Department of Biological Engineering

Undergraduate Researcher, Data Analyst, Programmer | September 2019-present

- Programmed pipelines to enable efficient processing and visualization of data frequently used and generated in the lab.
- Ran Monte Carlo simulations in order to advise research decisions.
- Used computational tools to process 500+ COVID-19 genomes and analyze mutational patterns in viruses.

### Summer Science Program in Biochemistry, Purdue University

Researcher | June-August 2018

- Identified and optimized a compound for development into commercially viable fungicide.
- Performed kinetics analysis and modeled proteins in *F. oxysporum*.

## LEADERSHIP

### MIT Undergraduate Research Technology Conference (URTC)

URTC Committee, Publicity Team | May 2020-present

- Organized our first virtual conference with 300+ attendees.
- Performing outreach and recruiting speakers and panelists.
- Designing publicity material and managing social media accounts.

### Girls Who Code, Penn High School

Founder & President | July 2018-June 2019

- Partnered with the University of Notre Dame to make technology and CS education more accessible to local high schools.
- Planned field trips & weekly classes for over 30 club members.

### South Bend Youth Symphony Orchestra (SBYSO)

Section Leader, Concertmaster | August 2013-May 2019

- Handled communication within the orchestra.
  - Collaborated with Grammy-winning artists and played in multiple world premieres.
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