

Laura Yao

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Education

Carnegie Mellon University
School of Computer Science
May 2024 (Expected)
Bachelor of Science in Computer Science

Richard Montgomery High School
(International Baccalaureate (IB) Program)
May 2020 ■ GPA: 4.00 ■ WGPA: 4.83
SAT: 1590

Coursework

Grt. Ideas in Theoretical CS (15251)
Prin. of Functional Programming (15150)
Vector Analysis (21269)
Nature of Language (80180)
Prin. of Imperative Computation (15122)
Mathematical Foundations of CS (15151)
Matrix Theory (21242)

Awards

Grace Hopper Conference 2020 Attendee
National Merit Winner - *\$2500 Scholarship*
Regeneron Science Talent Search Scholar
US Presidential Scholar Semifinalist
National AP Scholar
Mathworks Math Modeling Competition
1st Runner-up - *\$15,000 Scholarship*
HiMCM (Math Modeling) Finalist - *Top 8%*
DECA International Finalist
DECA State 1st Place
Lockheed Martin CodeQuest- *Top 5*
Lockheed Martin CyberQuest- *4th Place*

Skills

Proficient in Python, Java, Fortran, C, LaTeX,
Microsoft Office, Final Cut Pro
Basic HTML, JavaScript, Unity, C#, Flask
Fluent in English & Chinese
Proficient in Spanish

Extracurriculars

ScottyLabs
Puzzle Hunt CMU
CMIMC (Informatics and Math Competition)
Game Creation Society

Links

[linkedin.com/in/lauraiyao](https://www.linkedin.com/in/lauraiyao)
github.com/gss223

Experience

inteGIRLS, Co-founder & Leadership Team 2018 - Present

- Society for Science STEM Action Grant Recipient
- 501(c)3 certified
- Helped coordinate and create international Puzzle Hunt with more than 1500 participants
- Planned first DC area Math Competition for girls and non-binary students

Jane Street, Women in STEM Attendee July 2020

- Explored quantitative trading as well as math, computer science, finance, and probability

NASA Planetary Environments Lab, Intern June 2019 - August 2019

- Created a mathematical model of the mechanism behind unexplained methane plumes on Mars
- Implemented and visualized with Fortran and Python

Volunteer Experience

- Completed 420+ Student Service Learning Hours
- Tutored w/ Generation Z at local libraries (math & english)
- Summer Camp Counselor at VisArts, CS tutor
- Puzzle Class Teacher, Badminton Assistant

Projects

Battle of the Boy Bands Fall 2020 - Present

- Programmed boss-based rap game in Unity using C#

Social Action Project Fall 2020 - Present

- Helped develop a Chrome extension to showcase local businesses

Deep Learning Breast Cancer Mitosis Detection Summer 2019

- Detected mitotic cells on breast cancer histological images
- Researched lighthouse faster RCNN model with normalization to quickly detect breast cancer mitoses

Math Modeling 2019 - 2020

- Predicted effects of a water bottle ban on the US
- Used an SI disease model to project drug addiction and modeled risk factors

Leadership

Computer Team, Leader 2018 - 2020

- Taught lessons every week with topics such as recursion

Science Olympiad, Captain 2018 - 2020

- Organized team/overall structure and sourced materials
- Achieved 2nd & 3rd Place at States, Individual Top 3 Placer

Generation Z, President 2018 - 2020

- Connected HS students to over 100 ES & MS students for tutoring at local libraries

Math Modeling President (2019-20), DECA Leadership Team (2018-19),
HOSA Leadership Team (2018-19)