

# Carina X. Guo

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## EDUCATION

**Richard Montgomery High School (RMHS) - Rockville, MD**

AUGUST 2018 - PRESENT

International Baccalaureate (IB) Magnet Program (GPA: 4.0/Weighted GPA: 4.84)

**College:** University of Pennsylvania Management & Technology Summer Institute (94%)

**SAT:** 1570 (Reading and Writing - 780, Math - 790, Essay - 18), 800 (SAT Math II)

## EXPERIENCE

**Intern, Professor Jonathan Gruber (MIT) & Professor Rena Conti (Boston University)**

JUNE 2021 - PRESENT

- Research and assist pending paper, "The role of intellectual property protections in the development of COVID-19 vaccines."
- Evaluate 500+ COVID vaccine clinical trials and determine statistics on location, vaccine platforms, agreements, etc.
- Investigate impacts of compulsory licensing, manufacturing contracts, and IP agreements on COVID vaccine development based on Securities and Exchange Commission company filings.
- Research, assist revisions, and compile source data for 7th Ed. *Public Finance and Public Policy* textbook, one of the most-used public finance textbook in the United States.

**Student, University of Pennsylvania Management & Technology Summer Institute**

SUMMER 2021

- Studied Harvard Business School company case studies (IDEO, LinkedIn, Dropbox, etc.), attended seminars with entrepreneurs (Strella Biotech, Niantic, Lia, etc.), and built Arduino circuits.
- Built circuit [prototype](#), developed [website](#), and prepared the [executive summary](#) for our product: FulPillment, a smart pillbox and smartphone app duo that automatically keeps track of pill-taking and reminds the user to take/reorder them.

**Teaching Assistant, Art of Problem Solving Academy**

SUMMER 2020

- Taught 50+ middle and high school students concepts for AMC 10/12 alongside college instructors.
- Administered math competitions for students, writing questions and mentoring contestants.

**Fellow, Democracy Summer (Congressman Jamie Raskin)**

SUMMER 2019

- Conducted case studies and cost-benefit analyses on policies including gun control.
- Lobbied in Congress for bipartisan legislation and canvassed in various communities across Maryland and Virginia.

### Others

- University of Pennsylvania, Future of the Business World Program, Summer 2020
- Yale University, Economics for Leaders Program (Foundation for Teaching Economics), Summer 2020
- Harvard International Economics Essay Contest, 2020: "[The Big Brother Watching Us Today: Groupthink](#)"
- Wharton Global High School Investment Competition, 2020: [Final Investment Paper](#)

## SCHOOL LEADERSHIP

**Co-Founder, RMHS National Debate Team & Captain, Potomac Debate Academy**

AUGUST 2018 - PRESENT

- Lead research efforts, prepare cases, and debate domestic and foreign policy (e.g., international lending, federal debt reduction, corporate regulation, climate change policy, social spending, military expansion, etc.).
- Compete in Public Forum debate for my seventh year at Potomac Debate Academy (now Captain over 400+ students), championing Nationals, Georgetown, and Ridge, and reaching semi-finals at Harvard, Yale, and Stanford. Currently individually ranked 1st/18,000+ nationally.

**Captain, RMHS Math Team**

AUGUST 2018 - PRESENT

- Compete nationally and locally (county-level, AMC/AIME, Math Prize for Girls Competition, JHMT, HMMT, ARML, UMD, etc.).
- Write curriculum, present and lead team practices 1-3 times a week on probability, number theory, etc., and tutor students up to multivariable calculus.

**Captain, RMHS Computer Team**

AUGUST 2018 - PRESENT

- Run RM's own yearly programming competition, RMPC, compete nationally (ACSL, Lockheed Martin Code Quest, picoCTF), and tutor AP Computer Science Principles and Computer Science A.
- Write curriculum and present weekly on Java, Python, graph theory, cybersecurity, networks, etc.

**Executive Vice President, RMHS Distributive Education Clubs of America (DECA) Team**

AUGUST 2018 - PRESENT

- Organize and compete in international, state, and regional conferences in new divisions each year.
- Prepare presentations and lead practices for finance, marketing, hospitality, business law, etc.

## COMMUNITY SERVICE & LEADERSHIP

**President, Paper Bridges International Non-Profit Organization, Maryland Chapter** AUGUST 2018 - PRESENT

- Initiated the first education-based project in Paper Bridges, currently having sent 400+ books abroad.
- Diversify perspectives of advisory board by finding individuals with experience serving abroad e.g., Peace Corps volunteers.
- Contact media sources and schools, organizing 12 high school chapters to write letters to inspire orphans around the world.

**President, Beyond Resolved Non-Profit Organization, Maryland Chapter** AUGUST 2018 - PRESENT

- Organize panel discussions, fundraisers, and debate tournaments to help alleviate gender, race, and wealth-based inequities in the speech and debate community.
- Reach out to all 500 high schools in Maryland to spread debate fundamentals and resources.

**Delegate Advisor, RMHS Student Government Association Executive Board** AUGUST 2018 - PRESENT

- Coordinate class representatives for RMHS student body of 2,400+ and run monthly general assemblies.
- Oversee fundraisers, supply drives, and projects for medical research charities, disaster relief programs, and local businesses.
- Code programs and create databases to track student involvement efficiently.

**Volunteer, The Tacy Foundation** OCTOBER 2015 - PRESENT

- Tutor at the Piano Pals Program for underprivileged students from basic fingering to performance.
- Perform at the Shady Grove Hospital and local senior centers.

## AWARDS

### Debate

- **1ST/18,000+ DEBATERS**, National Speech and Debate Association Rankings, Public Forum Division, (as of October) 2021
- **CHAMPION (OUT OF ~325 TEAMS)**, National Speech and Debate Association National Championship Tournament (competitors chosen from qualifying district-level tournaments, then debated 17 rounds at Nationals to become champion), Public Forum, 2021
- **TOP 4 (OUT OF ~250 TEAMS)**, 47th Annual Harvard National Forensics Tournament, 2021
- **TOP 4 (OUT OF ~200 TEAMS)**, 35th Annual Stanford Invitational, 2021
- **1ST PLACE SPEAKER (OUT OF ~150 SPEAKERS), CHAMPION (OUT OF ~75 TEAMS)**, Georgetown Debate Tournament, 2020
- **TOP 4 (OUT OF ~300 TEAMS)**, Yale University Invitational Debate Tournament, 2020
- **1ST PLACE SPEAKER (OUT OF ~200 SPEAKERS), TOP 8 (OUT OF ~100 TEAMS)**, Mid-America Cup Debate Tournament, 2020
- **CHAMPION (OUT OF ~100 TEAMS)**, The Ridge Debates, 2019
- **SECOND PLACE (OUT OF ~35 TEAMS)**, Georgetown International Public Forum Tournament, 2019

### STEM

- **QUALIFIER**, MIT Math Prize for Girls 2021 (Top 300 Female AMC Scorers, 2021)
- **QUALIFIER**, AIME (Distinction, Top 5% of Testers), 2020 and 2021
- **SILVER FINALIST**, American Computer Science League (ACSL) All-Star Competition, Intermediate Division, 2020
- **1ST PLACE**, American Computer Science League (ACSL) All-Star Competition, Junior Division, 2018

### DECA/Entrepreneurship

- **2ND PLACE**, DECA International Conference, Financial Services Division, 2021
- **1ST PLACE**, DECA Regional Conference, Marketing Division, 2021
- **2ND PLACE**, DECA State Conference, Business Law and Ethics Division, 2020
- **1ST PLACE**, DECA State Conference, Business Law and Ethics Division, 2019
- **2ND PLACE**, International Leadership Foundation (ILF) Entrepreneurship and Innovation Contest, 2018

### C-SPAN

- **RECOGNITION**, Gov. Larry Hogan and Sen. Chris Van Hollen ([Link](#)), 2021
- **3RD PLACE**, C-SPAN StudentCam, HS Division ([Flatlining: The Case for Healthcare Expansion](#)), 2021
- **HONORABLE MENTION**, C-SPAN StudentCam, HS Division ([Funding the Future: Teachers in 2020](#)), 2020
- **HONORABLE MENTION**, C-SPAN StudentCam, HS Division ([Crossing the Oceans](#)), 2019

### Piano

- **LEVEL 10 (OUT OF 10) PIANO, HISTORY, AND THEORY CERTIFICATION**, Royal Conservatory of Music, 2021
- **SENIOR DISTINGUISHED MUSIC ACHIEVEMENT AWARD**, MSMTA (awarded after 18 competitions throughout high school, 16 of which placed in Top 3 e.g., Viola Hartman, MSMTA Solo Festival, Gottlieb Memorial, Doris and Larry Chase), 2021
- **A+ GRADE**, MSMTA High School Piano Exam, 2019 - 2021
- **WINNER (Performed with Orchestra)**, Gertrude S. Brown Concerto Competition, 2019
- **LEVELS 1-12 (OUT OF 12)**, MSMTA Music Theory Tests, Completed in 2019