

Education

IC West High School; Stanford University (Computer Science & Earth Systems)

Term GPA: 4.67W; Cumulative GPA: 4.42W

Anticipated Year of Graduation: 2026

Summary

I am an advocate of STEM, education, and environmentalism. Recognizing the pressing environmental challenges facing our planet, I utilized my knowledge of STEM to develop sustainable solutions to combat the climate crisis. I believe STEM is foundational in advancing society and am passionate about increasing accessibility to STEM education. Additionally, my experience as a journalist has allowed me to effectively communicate these critical issues, weaving the perspectives of various policymakers, scientists, and community members into factual, informative media.

Awards and Honors

- **2026 Regeneron Science Talent Search Top 300 Scholar** – Recognized as one of top seniors conducting research nationally through Regeneron STS.
- **2026 Coca-Cola Scholarship Regional Finalist (Top 150 in Nation) + National Merit Scholarship Finalist** – Nationally top 0.1% of Coca-Cola applicants and top 1% of PSAT scorers.
- **2026 State Economics Runner-Up** – Placed second in state for advanced economics.
- **2025 Mariah Becker Award – Herbert Hoover Presidential Foundation** – Recognized for spirit of volunteerism and awarded \$1K in funding after presenting efforts leading IC STEM for Youth.
- **2025 Presenter at the American Meteorological Society (AMS)** – Invited to present at the AMS Annual Conference for top research articles and professional researchers in Houston, TX.
- **2025 Publication in The Harvard Undergraduate Research Journal** – Recognized for excellence in scientific research; published in journal.
- **2025 Herbert Hoover Uncommon Student Award** – Recognized for student-run initiative and embodying Former President Hoover's traits of intersectional changemaking.
- **2025 Al Neuharth Free Spirit Award** – Sole Iowa representative and recipient of the Al Neuharth Free Spirit Journalism Award, recognizing the top student journalist in each state. Received scholarship + all-expense paid trip to Washington D.C..
- **2025 Yale Science and Engineering Award** – Received recognition for methane emissions research, awarded to the top research among juniors.
- **2025 United States Senate Youth Program Finalist** – Only junior finalist selected to represent Iowa at the United States Senate Youth Program, held in Washington D.C..
- **2024 EPA Presidential Award** – Selected along with nine other awardees demonstrating environmental stewardship to receive the award in Washington D.C. in August 2024. Issued by the Biden-Harris Administration.
- **2024 National STEM Champion & 2026 Finalist** – Declared a winner and National STEM Champion of the 2024 National STEM Challenge. Invited to present research in Washington D.C.. Received letter of commendation from former U.S. President Barack Obama.
- **2024 NASA Speaker** – Invited to present environmental engineering research and experience doing research at NASA event as a panelist. Aligns with current NASA research regarding post-combustion emissions.
- **2023 & 2024 Regeneron International Science and Engineering Fair (ISEF)** – Selected as a finalist to present research at ISEF conference in Dallas, TX under the Environmental Engineering category. Presented in Los Angeles, CA in May 2024 under the Earth and Environmental Sciences category. Won *Grand Award*.
- **2023 & 2024 State Science and Technology Fair** – Declared the State Grand Champion and State Champion and 1st in Environmental Sciences. Qualified to present at 2023 and 2024 Regeneron ISEF.
 - **Special Awards issued:** 2023 and 2024 Ricoh Sustainable Development Award, ISU Excellence in Environmental Health & Safety Award, United States Air Force Science Award, Excellence in Meteorology Award, NASA Earth Systems and Science Award

- **2023 & 2024 Eastern Regional Science and Engineering Fair** – Finalist and declared Class I project; Awarded top project in Physical Sciences.
 - *Special awards issued:* Rochester Institute of Technology National GENIUS Olympiad Nomination, US Navy and Marine Corps Award, Laverne & Frances Vaske Science & Education Memorial Award, NASA Earth Systems and Science Award
- **2023 Junior Science and Humanities Symposium** – Awarded 1st place for the Heartland region; invited to orally present at the national symposium.
- **2023 National Junior Science and Humanities Symposium** – Invited to highly selective national symposium in Virginia Beach, VA to present environmental engineering research as an oral presenter.
- **2023 Jacobson Institute National Business Pitch** – Top 10 national finalist to present environmental engineering research for commercialization and market penetration.
- **2022 3M Young Scientist Challenge** – Declared one of *America's Top 3 Young Scientists of 2022*. Invited to New York Stock Exchange as a bell ringer in the Opening Bell Ringing Ceremony.
- **2022 New York Stock Exchange Opening Bell Ringer** – Invited to ring Opening Bell at NYSE.

Experience

- Internship with Rayfield Systems under Stanford Artificial Intelligence Laboratory** **Virtual**
Interned under Rayfield Systems – Startup under Stanford A.I. Laboratory 2025
 Conducted remote research with Rayfield Systems under Stanford A.I. Laboratory to design automation tools for emissions tracking and energy workflows; developed high-fidelity prototypes in Figma, improving workflow clarity + UI usability by 15%. Interned after being selected for the Harvard Undergraduate Ventures-Tech Program.
- NASA Research Mentorship** **Virtual/Based in Silicon Valley**
Youngest-ever student researcher in collegiate NASA research mentorship 2024 to Present
 Selected to present environmental engineering research at NASA. Later invited to receive guidance from NASA scientists under a collegiate NASA research mentorship program. Given advice on product implementation and commercialization, while connecting with other NASA scientists and receiving input on research methodology.
- STEM for Youth – Founder and President** **Iowa City, IA**
Outreach organization aimed to deliver accessible STEM for elementary school students 2023 to Present
 Founded organization with the aim of delivering accessible and affordable STEM education to elementary school students across Johnson County. Impacted several schools and 800+ students across 15 major STEM events alone, with over 100 enrolled volunteers. Encouraged STEM and science research exploration through introducing concepts such as chemistry, earth sciences, engineering, and robotics across several programs. Led several meetings with several enrolled members, selecting an executive board that effectively raised nearly \$5K in program funding.
- West Side Story (WSS) Publication – Editor-in-Chief** **Iowa City, IA**
Leader in the newsroom – reporter and editor for one of the state's leading student publications 2023 to Present
 Currently the Co-Editor-in-Chief of one of Iowa's leading student-run publications, the West Side Story (WSS). Received the opportunity to cover various topics, ranging from Iowa educational legislation to the elections. Awarded 1st place in Iowa for in-depth news coverage; received a national "Best of Best of SNO" award, recognized as the top tech story published. Named one of Iowa's Top Emerging Journalists of 2024 and sole Iowa Representative for the Al Neuharth Free Spirit Award. Attended Columbia Student Press Association Summer Workshop on Editorial Leadership with a Full Ride. National finalist for Pacemaker as a publication + multimedia news article.
- 3M Research Experience** **Virtual/Saint Paul, MN**
Scientific research conducted under the guidance of Dr. Patrick Zimmerman 2022 to 2023
 Met with Dr. Zimmerman weekly to discuss research. Conducted thorough literature review under his mentorship. Received guidance regarding CAD designing and testing practices when exposed to automotive hazards. Connected with other specialized scientists to receive input on carbon nanomaterial properties and selectivity, thermal sensitivity, and product implementation. Successfully engineered prototype and tested, yielding high photocatalytic oxidation decomposition across various TWC-OC catalytic converters. Presented research to panel of 3M research scientists.