

Gauri Venkatraman

Aurora, IL



SKILLS

- Experience competing in regional science and art competitions
- Experience in leading and coordinating team / club activities
- Excellent communication skills, organized and great team player

EDUCATION

Waubonsie Valley High School

Aurora, IL

Sophomore

2020-2021

AWARDS AND COMPETITIONS

Highest Academic Honors

Fischer Middle School

2019-2020

Second Place Team

District 204 Mathcounts Competition

Feb, 2020

Fourth Place

VEX Robotics Competition

Feb, 2020

Structural Efficiency Award Third Place

4 H Bridge Bust Competition

Jan, 2020

Aesthetics Award Third Place

4 H Bridge Bust Competition

Jan, 2020

State Level

IJAS State Science Fair

May, 2019

STEM PROJECTS

COCA AIE Team Member

University of Illinois 4-H Extension, IL

2020-2021

- Attended team leader training for Curbing Our Carbon Appetite Program held by Bayer.
- Created and used fun activities like a model, card game, and game board to teach about carbon emissions and how to be more carbon friendly.
- Taught 600 teens about the COCA program.
- Learned to teach, instruct, and manage teens, as well as how to help them learn to teach others.
- Taught 30 teens on how to teach others the COCA program.

Rain Garden Installation Management Team Leader

University of Illinois 4-H Extension, IL

2020-2021

- Created the idea of a rain garden in order to help the community and educate about nitrogen runoff.
- Applied for Nutrien grant for funding of rain garden, created a presentation, and won.
- Built a functional rain garden.
- In charge of constructing a rain garden and had to figure out what to plant, where to plant it, how to take care of it, etc.
- Instructed others on their roles regarding the garden.
- Used the rain garden to teach other people about nitrogen runoff and water pollution.

RISE (Research, Inquiry, Skills & Experimentation) Program

2019-2020

Illinois Math & Science Academy, Aurora, IL

Involved in a year-long program of independent learning and research for two consecutive years.

Second year project:

- Researched on mustard crops, which are used as bio fumigants, cover crops, and green manure to keep pests and diseases away.
- Conducted experiment to determine the effect of planting depth on the growth of mustard seeds.
- Selected to present in the IJAS paper session but the event was cancelled due to COVID-19.

First Year Project:

- Researched on rechargeable Li-ion batteries, which are lightweight, high energy density power sources.
- Conducted an experiment to compare durability features of the three brands.
- Presented work in regional level competition and was selected to present at state level for Illinois Junior Academy of Science (IJAS) competition.

2019-2020

STEM Walk-in Co-chair

2019-2021

University of Illinois 4-H Extension, IL

- Responsible for designing and organizing STEM activities for elementary and middle school age kids.
- Met with members regularly to plan for future STEM events.
- Managed activities for kids during STEM events like pasta bridge-bust Competition.

Science Ambassador

2017-2021

University of Illinois 4-H Extension, IL

- Met with members twice each month for 2 hours to discuss future STEM Events.
- Managed stations during STEM events like - school science fair, drone training.

Biomedical Engineering Program

Summer, 2020

Illinois Math & Science Academy, Aurora, IL

- One-week program involving study of biomedical technology (ex: x-rays, CT scans), the heart and associated diseases.
- Presented a report on prosthetics after doing pre-requisite research and modeled a working heart.

Genetics: The Power and Pitfalls of a Modern Revolution (TPPMR) Program

Summer, 2020

Illinois Math & Science Academy, Aurora, IL

- Six-week program involving gene research analysis, studying genetics and genetic diseases, along with peer discussion.
- Opportunity to discuss with an expert in the field, genetic scientist Dr. Ricki Lewis.
- Examined studies of viruses, possible treatments, and clinical trials.

Worldwide Youth in Science and Engineering (WYSE) Program

Summer, 2020

University of Illinois, Urbana Champaign, IL

- Two-week program involving building model airplanes, experimenting on crystals, designing infrastructure for houses, and researching different areas of engineering (ex: aerospace, chemical).
- Spoke with experts regarding various engineering fields.

Mission Near-Space Program

Summer, 2019

Adler Planetarium, Chicago, IL

- One-week program exploring stratosphere, challenges of near-space exploration, plus examining after-effects of stratosphere on selected experimental objects.
- Objects were launched into the stratosphere via a high-altitude hot air balloon. Data was collected via three cameras mounted on the launch basket (camera 1 recorded video, camera 2 charted balloon path, camera 3 measured temperatures, tracking devices were used to coordinate with the base computer).

Oceanography Program

Summer, 2019

Illinois Math & Science Academy, Aurora, IL

- One-week long program involving the research of ocean dynamics and sea creatures, dissection of sea creatures, creating and testing water bottle submarines to rescue / hold ocean creatures.

GenCyber Program

Summer, 2018

College of DuPage, Glen Ellyn, IL

- Six-week program on cyber security (credentials, vulnerabilities, awareness), cybercrime, social engineering, ethics, and trends.
- Experimented with Raspberry Pi, cryptography, networking, and cybercrime simulation.
- Spoke with various experts on cyber security.

Entrepreneurship IN2 Program

Summer, 2018

Illinois Math & Science Academy, Aurora, IL

- One-week program on business simulation, designed a business idea, created prototypes, and pitched to investors.

AFTER SCHOOL STEM ACTIVITIES

Science Olympiad Team 2019-2021

Waubonsie Valley High School, Aurora, IL

Team member in middle school (Fischer Middle School) and high school level teams.

- Competed in categories (middle school) - anatomy and physiology and fossils.
- Competing in categories (high school) - anatomy and physiology and forensics.

GEMS Club 2020-2021

Waubonsie Valley High School, Aurora, IL

VEX Robotics Club 2019-2020

Engineering for Kids, Aurora, IL

Girls Who Code 2018-2020

Fischer Middle School, IL

- Programmed an exam to recognize possible book recommendations for the user, in line with the theme of "Quizzes".
- Programmed a quiz using scratch to identify and inform about a famous woman in STEM as a practical application of the yearly theme "Women in STEM".
- Programmed an arcade simulation on scratch with various minigames (ex: tic-tac-toe) as an example project for the theme of "Games".

EXTRA CURRICULAR ACTIVITIES

Aurora Youth Council Member 2020-2021

City of Aurora, Aurora, IL

Speech Team Member 2020-2021

Waubonsie Valley High School

- Team meets once each week for 1.5 hour.
- Competed in the original oratory category.

Student Director Tech Crew 2019-2020

Fischer Middle School Musical

- Met twice a week for two hours.
- Responsible for the delegation of roles (ex: props, painting sets), communication between cast student director and the directors (teachers), managing the arrangement of roles during the production (ex: guiding students)

2020-2021

Wind Symphony

Waubonsie Valley High School, Aurora, IL

- Flute player as freshman in second highest advanced band level

- Meets daily for an hour 2017-2020
- **Wind Ensemble** (*Fischer Middle School*)
 - Flute player in extra-curricular advanced band
 - Met once a week for an hour

Library Helper (Volunteer) 2017-2020

Fischer Middle School, Aurora, IL

Peer Math Tutor (Volunteer) 2018-2020

Fischer Middle School, Aurora, IL

Teen Advisory Board Member 2017-2021

Eola Public Library, Aurora, IL

TAB consists of teen members who help the library plan special programs and assist with projects. TAB aims to make the library an interesting and exciting place to visit for the young members of the community.

- Meets monthly to discuss and plan activities / events.
- Planning team member for t-shirt logo.
- Helped at the front desk during special events.