
Education

2017–2021 **Fox Chapel Area High School**, Pittsburgh, PA.
GPA: 4.23, top decile

Honors

- 2020 **National Winner**, *Aspirations in Computing Award*.
National Center for Women & Information Technology
 - Selected as one of 40 award recipients out of over 4,700 applicants all over the country
- 2020 **Regional Affiliate Winner**, *Aspirations in Computing Award*.
National Center for Women & Information Technology, Western & Central PA Affiliate
- 2019 **National Honorable Mention**, *Aspirations in Computing Award*.
National Center for Women & Information Technology
 - Selected as one of 360 award recipients out of over 4,300 applicants all over the country
- 2019 **National Fellow**, *she++ #include Fellowship*.
 - Selected as one of 50 national #include fellows helping drive tech education in their community
- 2018 **2nd Place**, *Covestro Pittsburgh Regional Science and Engineering Fair*.
Senior Biology Category
 - Won for "Computational Biology Approach to Identifying the Genetic Pathways that Impact Neurodegenerative Diseases"
- 2018 **Regional Affiliate Honorable Mention**, *Aspirations in Computing Award*.
National Center for Women & Information Technology, Western & Central PA Affiliate
- 2017 **Carnegie Science Award**, *Covestro Pittsburgh Regional Science and Engineering Fair*.
Outstanding project in Intermediate Division
 - Won for "Pensieve: Analyzing the Genes that Affect Memory"
- 2017 **1st Place**, *Covestro Pittsburgh Regional Science and Engineering Fair*.
Intermediate Biology Category
 - Won for "Pensieve: Analyzing the Genes that Affect Memory"
- 2016 **1st Place**, *Covestro Pittsburgh Regional Science and Engineering Fair*.
Intermediate Biology Category
 - Won for "Brainwave: The Distraction Prevention Invention"
- 2015 **National 3rd Place**, *Discovery 3M Young Scientist Challenge*.
Selected as one of ten national finalists; won third place overall
 - Won for "Brainwave: The Distraction Prevention Invention"
- 2015 **Congratulated on the floor of the U.S. Congress**, *Congressman Keith Rothfus*.
 - Recognized for "Brainwave: The Distraction Prevention Invention"

Experience

2020 **Zero App.**

Volunteer - Development, Marketing teams

- Contact tracing app which determines the safety of local businesses in the community during the COVID-19 pandemic
- Front-end coding
- Research on every state's use of contact tracing
- Outreach to businesses in New Rochelle, NY to gauge use of safety measures
- Only high-school student working on team

2020 **AMIA Symposium 2020**, *American Medical Informatics Association*.

Reviewer

2019 **UPMC Hillman Cancer Center Academy.**

Hillman Academy Scholar

- Selected as one of 72 high-school students to attend the program
- Conducted research at the Neurogenomics lab with mentors Dr. Andreas Pfenning and Easwaran Ramamurthy
- Conducted research into epigenetic blood biomarkers for Alzheimer's Disease
- Presented preliminary results at the end of the program

October 2018 **Neurogenomics Lab**, *Carnegie Mellon University*, Pittsburgh, PA.

- Present Research Assistant

- Work on high performance computing clusters
- Conduct statistical analysis on genomic (RNA-seq) and epigenomic (ChIP-seq) data
- Create complex visualizations using R and Python
- Code in R and Python, have experience with using AWS, SLURM clusters

July 2018 - **Heart Input Output, Inc.**, Pittsburgh, PA.

August 2018 Machine Learning and Data Science Intern

- Researched the use of ML to predict coronary artery disease
- Assisted with grant-writing (NSF SBIR)
- Created website with integrated dashboard

Projects & Awards

2017 - 2018 **Computational Biology Approach to Identifying the Genetic Pathways that Impact Neurodegenerative Diseases.**

Investigating potential connections between brain development and neurodegeneration.

Awards

- 1st Place at Pennsylvania Junior Academy of Science Region 7, Biology
- 1st Place Pennsylvania Junior Academy of Science States
- Pennsylvania State Finalist for the Biotechnology BioGENEius Challenge
- 2nd Place, Covestro Pittsburgh Regional Science and Engineering Fair, Senior Biology category

2016 - 2017 **Pensieve: Analyzing the Genes that Affect Memory.**

Found a novel connection between the development of the hippocampus and Alzheimer's Disease.

Awards

- [Carnegie Science Award, Intermediate Division](#)
- 1st Place, Covestro Pittsburgh Regional Science and Engineering Fair, Intermediate Biology category
- 1st Place, Perfect Score, Pennsylvania Junior Academy of Science States
- National Finalist at ProjectCSGirls competition
- National Broadcom MASTERS Semifinalist

2015 - 2016 **Brainwave: The Distraction Prevention Invention.**

Created a wearable device that works with an EEG headset to provide alerts to a user when they get distracted, based on their brainwaves.

Awards

- 1st Place, Covestro Pittsburgh Regional Science and Engineering Fair, Intermediate Engineering & Robotics category
- [National 3rd Place in Discovery 3M Young Scientist Challenge](#)
 - [National Finalist in Discovery 3M Young Scientist Challenge](#)
- 1st Place, Invention Category, Pittsburgh Teen Media Awards

Media

- [These Prize-Winning Young Scientists Will Make You Feel Better About the Future](#), Fox & Friends
- [Resume: A newsmaker you should know / 12-year-old Amulya Garimella is finalist for 'America's Top Young Scientist'](#), Pittsburgh Post-Gazette
- [Young Achiever: Amulya Garimella](#), TribLive

Other Recognition

- [Congratulated on floor of US Congress](#), Keith Rothfus

Activities

- 2019 - **FoxTales Quarterly**, Fox Chapel Area High School.
Present Editorial Board Editor-in-Chief & Student Editor
- Wrote articles for quarterly student magazine
 - Founded Editorial section and wrote opinion articles
 - Wrote for other publications such as the local Shady Ave Magazine
- 2019 - **VOTE Club**, Fox Chapel Area High School.
Present Club Co-Founder & Vice President
- Organized voter registration drives in school
 - Spread awareness on how and why to vote
- 2018 - **STEM Symposium**, Fox Chapel Area High School.
Present Head Student Organizer & Symposium Chair
- A pioneering high school bioinformatics conference, the STEM Symposium introduced the concepts of computational biology to high school students of all skill levels and interests
 - Raised \$2,500 to fund the event for 2018-2019 with one sponsor, \$4750 for 2019-2020 with three sponsors
 - In 2020, hosted 10 presenters from local universities and companies; and over 200 students from the Greater Pittsburgh Area, including students from underprivileged schools
 - In 2020, gave \$3000 to 6 underprivileged school districts to cover costs of transportation and substitute teachers
 - Created [Symposium website](#) and other outreach materials
- 2018 - **STEM Outreach Club**, Fox Chapel Area High School.
Present Club Founder & President
- The STEM Outreach Club aims to blend volunteer work with STEM education, giving members the opportunity to both teach and learn
 - Club provides STEM exposure to students in middle and elementary school by conducting hands-on workshops and educating students about STEM careers
- 2018 - **Women's Issues Today**, Fox Chapel Area High School.
Present 2019: Vice President
- Stocked free feminine hygiene products in school restrooms
 - Educated students on feminism and women's issues in the US and globally
- 2008 - **Tang Soo Do Karate College**.
Present 2nd Degree Black Belt, 2017
- Practice traditional Korean martial arts (Tang Soo Do)

Skills

Programming.

HTML, JavaScript, NodeJS, C++, Ruby, Python, MATLAB, R, Creating websites from scratch

Presentation & Public Speaking.

Event Organization.

Fundraising.