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## Education

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

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## 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
- 2018 **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"

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## Experience

2019 **Hillman Academy Scholar**, *UPMC Hillman Cancer Center Academy*.

- 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

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## 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

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## 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
  - Hosted 10 presenters from local universities; and over 150 students from the Greater Pittsburgh Area, including students from underprivileged schools
  - 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)

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## Skills

### Programming.

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

### Presentation & Public Speaking.

### Event Organization.