

# Riya Senthil

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## EDUCATION

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### Central Bucks High School South, Warrington, PA

Expected Graduation: June 2022

- AP Coursework
  - Completed: Chemistry (5), Biology (4), Computer Science Principles(4), Calculus AB (5).
  - Ongoing: Calculus BC, Physics (Newtonian Mechanics), Statistics, Macroeconomics.
- GPA: Unweighted: 3.7949 Weighted: 4.2179
- SAT Super score: 1490. Math: 780, ERW: 710

### Summer Institute for the Gifted (SIG) at Princeton University

Summer 2018

- Coursework in engineering, genetics, algebra, and microbiology

### University of Pennsylvania Girls in Engineering Math and Science Program (Penn GEMS)

Summer 2018

- One of 70 students accepted from a pool of 300 applicants

## HONORS & AWARDS

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### 2022 Commended National Merit Scholar

- Scored within top 50,000 students nationwide who took the PSAT in 2020

### Johns Hopkins Center for Talented Youth Advanced Level in English and Math

### First Lego League (FLL) 3rd Place Robotics Award

- Won 3rd place out of 45 regional finalists in UPenn at 2018 Southeast Finals

### Shaolin Kempo Karate 2nd Degree Black Belt

- 8 years of training and knowledge of over 100 combinations and 14 forms

### 2019 1st Place Sparring, Villari's Shaolin Kempo Karate PA Regional Tournament

### 2018 2nd Place Sparring, Villari's Shaolin Kempo Karate PA Regional Tournament

### 2018 4th Place Self-Defense, Villari's Shaolin Kempo Karate PA Regional Tournament

### 2018 Robert M. Gendall Award: given to 4 students out of 270 in my grade for exemplary class participation

## EXPERIENCE

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### Two Research Projects: (1) Predicting Recessions and (2) Predicting Breast Cancer using Machine Learning

2021

- Guided by Prof. Badrinath Kottimukkalur of George Washington University
- Predicted the presence of malignant breast cancer cells using features from histological cell images.
- Predicted Recessions using data from Federal Reserve Economic Data
- Self-taught Python coding language

### Volunteer at Lansdale Abington Jefferson Hospital

March 2020-present

- Manage front desk duties, such as checking patients in, delivering packages, and communicating patient statuses with nurses
- 4-5 hours a week, 47 weeks a year.

### Blood Drive Coordinator, Red Cross Club

December 2019-present

- Coordinated blood drive of over 60 people
- Raised \$160 for the Red Cross

### FLL Robotics Junior Mentor

Present

- Taught children robotics building and coding

### FLL Robotics Leader and Member

2018-2019

- Founded all-female robotics team, recruited 4 peers, and participated in tournaments.
- Designed, developed and coded multiple robots to complete competitive tasks

<b>Leadership Program at Villari's Self-Defense</b>	<b>December 2018-present</b>
<ul style="list-style-type: none"> <li>• Organize and set up tournaments</li> <li>• Volunteer to help younger kids with their forms</li> <li>• Organize fundraisers for Manna on Main Street, raising ~\$11,000 each year</li> </ul>	

## CLUBS AND ACTIVITIES

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<b>Villari's Shaolin Kempo Karate</b>	<b>2013-Present</b>
<ul style="list-style-type: none"> <li>• Second-degree black belt</li> </ul>	
<b>First Tech Challenge: Robotics</b>	<b>October 2021-Present</b>
<ul style="list-style-type: none"> <li>• Member of school team to participate in robotics competitions</li> </ul>	
<b>National Honors Society</b>	<b>October 2020-Present</b>
<b>Science National Honor Society</b>	<b>October 2020-Present</b>
<b>Titan Senate (Student Council)</b>	<b>September 2020-Present</b>
<ul style="list-style-type: none"> <li>• Organized set and created COVID precaution rules for Junior Prom</li> </ul>	
<b>Young Democratic Socialists of America (YDSA)</b>	<b>September 2020-Present</b>
<ul style="list-style-type: none"> <li>• Advocate for social issues such as walking door to door to encourage people to vote in the school board election</li> <li>• Raised money for a bake sale for LGBTQ+ event, raising a total of \$300 dollars</li> </ul>	
<b>Chem Club</b>	<b>September 2019-Present</b>
<b>Health Occupations Students Of America (HOSA)</b>	<b>September 2019-Present</b>
<ul style="list-style-type: none"> <li>• Learned about professions in the health field</li> <li>• Designed Healthy Lifestyle projects</li> </ul>	
<b>First Lego League (FLL) Robotics</b>	<b>2017-2019</b>
<ul style="list-style-type: none"> <li>• Dedicated 5-6 hours a week to robotics</li> <li>• Designed, developed, and coded a robot</li> <li>• Won overall 1st place award and 1st place robotics award at Hatboro Horsham Qualifier Event in 2017 and 2018</li> <li>• Won Teamwork award and 3rd place robotics award at UPenn regionals in 2019</li> </ul>	
<b>Red Cross Club</b>	<b>September 2019-Present</b>
<ul style="list-style-type: none"> <li>• Help in my community by raising money for the red cross</li> <li>• Spent a total of 25+ hours volunteering</li> </ul>	
<b>Four Diamond Minithon</b>	<b>November 2019</b>
<ul style="list-style-type: none"> <li>• 6 hour event dedicated to fighting childhood cancer</li> <li>• My group raised a total of \$200 for cancer</li> </ul>	