

Riya Senthil

110 Galway Cir, Chalfont, PA 18914
riyasenthil8@gmail.com

EDUCATION

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

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

Two Research Projects: (1) Predicting Recessions and (2) Predicting Breast Cancer using Machine Learning 2021

- Guided by Prof. Badrinath Kottimukkalar 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

Leadership Program at Villari's Self-Defense December 2018-present

- Organize and set up tournaments
- Volunteer to help younger kids with their forms
- Organize fundraisers for Manna on Main Street, raising ~\$11,000 each year

CLUBS AND ACTIVITIES

Villari's Shaolin Kempo Karate 2013-Present

- Second-degree black belt

First Tech Challenge: Robotics October 2021-Present

- Member of school team to participate in robotics competitions

National Honors Society October 2020-Present

Science National Honor Society October 2020-Present

Titan Senate (Student Council) September 2020-Present

- Organized set and created COVID precaution rules for Junior Prom

Young Democratic Socialists of America (YDSA) September 2020-Present

- Advocate for social issues such as walking door to door to encourage people to vote in the school board election
- Raised money for a bake sale for LGBTQ+ event, raising a total of \$300 dollars

Chem Club September 2019-Present

Health Occupations Students Of America (HOSA) September 2019-Present

- Learned about professions in the health field
- Designed Healthy Lifestyle projects

First Lego League (FLL) Robotics 2017-2019

- Dedicated 5-6 hours a week to robotics
- Designed, developed, and coded a robot
- Won overall 1st place award and 1st place robotics award at Hatboro Horsham Qualifier Event in 2017 and 2018
- Won Teamwork award and 3rd place robotics award at UPenn regionals in 2019

Red Cross Club September 2019-Present

- Help in my community by raising money for the red cross
- Spent a total of 25+ hours volunteering

Four Diamond Minithon November 2019

- 6 hour event dedicated to fighting childhood cancer
- My group raised a total of \$200 for cancer