Riya Senthil

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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 Learning2021

* 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 ClubDecember 2019-present

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

FLL Robotics Junior MentorPresent

* Taught children robotics building and coding

FLL Robotics Leader and Member2018-2019

* 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-DefenseDecember 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 Karate2013-Present

* Second-degree black belt

First Tech Challenge: RoboticsOctober 2021-Present

* Member of school team to participate in robotics competitions

National Honors SocietyOctober 2020-Present

Science National Honor SocietyOctober 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 ClubSeptember 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 ClubSeptember 2019-Present

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

Four Diamond MinithonNovember 2019

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