

Profile

Personal Information

Name Senthil, Riya
Share different name No
Birthdate 10/08/2004
Pronouns She/Her
Gender Identity Female

Contact Details

Email, Phone riyasenthil8@gmail.com, +1.267-897-5006, Mobile, +1.215-716-1324, Home
Permanent Address 110 Galway Cir Chalfont, PA, 18914-3900, USA

Demographics

Sex Female
Military Status None
Hispanic or Latino/a/x No
Race Asian (India)

Language

Telugu Speak, Spoken at Home
English First Language, Speak, Read, Write, Spoken at Home

Geography and Nationality

Citizenship Status U.S. citizen or U.S. national
Birthplace Hackettstown, New Jersey, United States of America (17 Years US, Years Non-US)

CA Fee Waiver

Fee Waiver Requested No

Family

Household

Parents Married
Home Both Parents

Parent 1

Mother

Name Mrs. Ramya Balaram
Email, Phone +1.215-716-1324, Home
Occupation Nurse, Employed,
Education Graduate school
Associates (2014), **Bucks County Community College, Newtown, PA, USA**
Bachelors (2015), **Penn State Abington, Abington, PA, USA**
Masters (2019), **Villanova University, Villanova, PA, USA**

Parent 2

Father

Name Mr. Senthil K Murugan
Email, Phone senthilmurugan@yahoo.com, +1.215-716-1324, Home
Occupation Other, Quantitative Sciences, Employed, Merck & Co
Education Graduate school
Bachelors (1995), **Ratnavel Subramaniam College of Engineering, Dindigul, Tamilnadu, IND**
Masters (1998), **Indian Institute of Technology Madras, Chennai, Tamilnadu, IND**
Masters (2012), **Central Connecticut State University, New Britain, CT, USA**

Education

Current or Most Recent Secondary School

Central Bucks High School South, Warrington, PA, USA, Public, CEEB: 394992 (09/2019 - 06/2022)

Progression No change in progression

Graduation Date 06/2022

Colleges & Universities

Grades

Rank na / 580

GPA 4.2179 / 4 , Weighted

Current or Most Recent Year Courses

First Quarter	Second Quarter	Third Quarter	Fourth Quarter
CALC -	CALC - AP Calculus BC - (AP)	CALC - AP Calculus BC - (AP)	CALC - AP Calculus BC - (AP)
PHYS - AP Physics Newtonian Mechanics - (AP)	PHYS - AP Physics Newtonian Mechanics - (AP)	PHYS -	PHYS -
MATH -	MATH -	MATH - AP Statistics - (AP)	MATH - AP Statistics - (AP)
HIST - AP Macroeconomics - (AP)	HIST - AP Macroeconomics - (AP)	HIST -	HIST -
OTH/ELE - Personal Finance - (REG)	OTH/ELE -	OTH/ELE -	OTH/ELE -
LANG - Spanish 5 - (REG)	LANG - Spanish 5 - (REG)	LANG -	LANG -
ENG -	ENG -	ENG - English 12-Hon - (HON)	ENG - English 12-Hon - (HON)
SCI -	SCI -	SCI - Anatomy and Physiology - (REG)	SCI - Anatomy and Physiology - (REG)

Honors

2022 National Merit Commended Scholar	National	12
AP Scholar with Honor Award	National	11, 12
Science National Honors Society	School	11, 12
National Honors Society	School	11, 12
President's Education Award Program	National	9

Future Plans

Scientific researcher, Doctorate

Testing

SAT Tests

Evidence-based Reading and Writing	710	08/28/2021
Math	780	10/03/2020
Taken	3	
Planned	0	
SAT Essay	No	

AP Subject Tests

Chemistry	5	05/2020
Biology	4	05/2021
Computer Science Principles	4	05/2021
Calculus AB	5	05/2021

Activities

Research

12
Year
7 hr/wk, 12 wk/yr
Continue

Machine Learning Research Projects, Dr. Badrinath Kottimukkalur, George Washington University, Washington DC.
Two projects guided by Dr. Badrinath Kottimukkalur of GWU. 1) Predicting presence of malignant breast cancer cells 2) predicting economic recessions.

Community Service (Volunteer)

10, 11, 12
Year
5 hr/wk, 50 wk/yr
Continue

Front Desk Supervisor, Jefferson Lansdale Abington Hospital
Communicate with nurses regarding patient statuses, deliver packages to patients, check-in visitors; 250+ total hours

Athletics: Club

9, 10, 11, 12
Year
3 hr/wk, 50 wk/yr
Continue

Other Sport, Karate Leadership Program/2nd Degree Black Belt, Villari's Self Defense Karate
Help set up fundraiser events (raised ~\$11,000 for local soup kitchen per year), and tournaments; 1st place sparring 2019; 2nd place sparring 2018.

Other Club/Activity

11, 12
School
2 hr/wk, 15 wk/yr
Continue

Blood Drive Coordinator, CB South Red Cross Club
Organized blood drive for 60 people; organized fundraiser and raised \$160 for the Red Cross; Geo Mapped locations in Africa for Red Cross volunteers.

Robotics

9, 12
School
10 hr/wk, 12 wk/yr
Continue

Team Founder and Captain, Robot Coder, Mentor, First Lego League (FLL), First Tech Challenge (FTC)
Won 1st place overall at qualifier event; won teamwork award and 3rd place robot award at regional UPenn event; currently mentoring FLL Jr. team.

Student Govt./Politics

9, 11, 12	Junior Prom COVID Rules Organizer, Titan Senate Student Council
School	
1.5 hr/wk, 10 wk/yr	Organized COVID guidelines, DJ arrangements, and music playlists for Junior Prom; organized spirit week; promoted clubs within school.
Continue	

Career Oriented

11, 12	Member, Science National Honors Society
School	Learned about science-based professions such as biologics and vaccine analytics, manufacturing systems design, and chemical engineering.
2 hr/wk, 8 wk/yr	
Continue	

Community Service (Volunteer)

11, 12	Community Volunteer, National Honors Society
School	Volunteered 10+ hours for my school/community for police dog training and Senior Prom as a parking assistant
1 hr/wk, 10 wk/yr	

Science/Math

10, 11, 12	Competitor, Health Occupation Students Of America (HOSA)
School	Created healthy lifestyle projects, learned about health related occupations such as neurologist, nurse practitioners, and pediatricians.
3 hr/wk, 15 wk/yr	
Continue	

Science/Math

10, 11, 12	Member, Chem Club
School	Perform chemistry experiments to understand Chemistry further. For example, hydrophobicity of lycopodium spores and sodium's reaction to water.
3 hr/wk, 8 wk/yr	
Continue	

Writing

Personal Essay

Some students have a background, identity, interest, or talent that is so meaningful they believe their application would be incomplete without it. If this sounds like you, then please share your story.

It's March 2019, and I'm at my first-ever black-belt level tournament. I've been practicing karate for six years, but only had my first-degree black belt for six weeks. This is the first time I'm competing against other black belts, most of whom appear stronger, taller, older, and a higher rank than me. My heart is pounding. I'm only one of four girls competing among fifteen guys. I approach my opponent, a male friend I spar with on a regular basis in practice. He usually beats me, so I'm nervous.

As our Master yells, "Go!" I quickly jab at my opponent's stomach. The master stops us; I've scored a point! I now know I have a chance of winning this. After a few rounds, we're head-to-head, and like a blur, we're competing for the winning point. The master yells, "Go!" I get a front kick in on my opponent which he is slow to block. The master awards me a point, and I hear cheering in the crowd. I've won!

Whether it's at karate, or in my STEM classes, I'm used to being one of the only girls in the room. As a second-degree black belt, there's only one other girl at my dojo who's at the same level. Similarly, in my engineering class, I was the only girl among thirty guys.

Someone might ask, "Why do these gender disparities matter?" When it comes to STEM, the gender disparity matters because if women are unequally represented in a field (in 2019, women represented 27% of all STEM workers), that field misses out on the innovations that women might have otherwise contributed. Likewise, in karate, if women aren't participating, we lose potential for innovation. Since women are generally smaller than men, they often have to develop new techniques (such as tracking your opponent's moves very closely) to defend themselves against a larger attacker. Speed, balance, and accuracy are just as—if not more—important than strength. Working in male-dominated spaces has affected my perspective and goals: my objective within STEM is to develop solutions for gynecological cancers. Medical bias has historically been a problem in women's health, and through my own research, I hope to change that.

It's not just the gender dynamics of STEM fields that karate has prepared me for: karate has instilled in me the stamina, focus, attention to detail, and respect for craft that a career in STEM demands. Karate has developed my stamina through the three-hour tests I must pass in order to advance to a higher belt level. A tremendous amount of focus goes into my forms (long series of movements designed to develop specific abilities) since I must perfect the stances and hand configurations.

While much of karate is solitary, there's also a fair amount of collaboration. You can't spar on your own—you need a partner you can trust. Along those same lines, collaboration is an important factor in closing the gender gap in STEM. I saw this firsthand when I led Kosmic Kanines, an all-girl robotics team. In an environment that was almost entirely male-dominated, my teammates and I bounced ideas off of each other to build and code a robot. Collaboration encouraged our momentum, which resulted in the first-place teamwork award at a regional

tournament.

After I collect my trophy at the karate tournament, my male opponent approaches me and says, "Surprising win, huh?" *Surprising?* I think. *What's that supposed to mean?*

"Thanks," I say, thinking about what a kick the Kanines will get out of this interaction when I tell them about it later. "Better luck next time."

PREVIEW

Education Progression

Education progression details

No change in progression

PREVIEW

University of Pittsburgh Questions

General

Term of entry	Fall 2022
Preferred Admission Plan	Rolling Admission
Housing	On-Campus
Do you consider yourself part of the LGBTQIA+ community?	No
If you wish, please indicate your religious preference.	Hindu
Do you intend to use a fee waiver code from the University of Pittsburgh?	No
Campus Preference #1	Pittsburgh
Veteran Education Benefit	No
Citizenship	U.S. Citizen

Academics

School	School of Computing and Information
Intended Field of Study	Computational Biology
The University of Pittsburgh allows students to decide whether or not they would like their SAT or ACT scores considered as part of the application process. Please share with us your plans regarding the submission or consideration of SAT/ACT scores as part of your application.	Yes, include my SAT/ACT scores as part of the review for admission. Note: Pitt does not accept self-reported test scores. Scores must be sent directly from the testing agency.

**Guarantee
Admissions
Program**

Physician Assistant

Are you currently a home school student (taught at home under the guidance of a parent or legal guardian)?

No

Contact Preference

If you wish to be contacted by the University of Pittsburgh via mobile phone, please provide your phone number.

I consent to be contacted by University of Pittsburgh at the mobile phone number provided below.

Phone Number

+1.267-897-5006

Family

Is your parent or guardian employed at Pitt as a full-time faculty member, staff member, or related position?

No

Residency

Are you a resident of Pennsylvania?

Yes, more than one year

Is your mother a resident of Pennsylvania?

Yes, more than one year

Is your father a resident of Pennsylvania?

Yes, more than one year

Is your guardian a resident of Pennsylvania?

Not Applicable

Pitt Honors Application

Would you like to Yes
apply to Pitt
Honors now?

If you could change anything in the world, what would it be? Explain why and how you would change it.

If I could change anything in the world, it would be to implement free universal healthcare in the United States. Everyone in America has different levels of access to healthcare based on a variety of factors, from pre-existing conditions to income levels. My proposal is to abolish privatized healthcare and repurpose existing hospitals and insurance companies into government-run hospitals and healthcare sectors.

There are a number of reasons why I believe free universal healthcare should be implemented in the United States. Chief among them is that countries with free universal healthcare, on average, have better health outcomes than their non-universal peers. Life expectancy in the US (across all states and genders) in 2019 was 78.79 years. By comparison, life expectancy in countries with free universal healthcare was higher: Japan (84.36), Denmark (81.20), Norway (82.91), Canada (82.05), and the United Kingdom (81.20). If we look at state-by-state data, the picture painted by statistics becomes starker. In Mississippi, the state with the lowest life expectancy of 74.6, nearly ten years behind that of Japan.

I saw firsthand how important affordable healthcare is when my mom dislocated her knee and needed emergency help. She was picked up by an ambulance to be taken to a hospital three miles from our house. The ambulance bill before insurance was around \$2,000 (\$666.67 per mile), and even with insurance coverage, my mom still owed \$800 (\$266.67 per mile) out of pocket. This experience led me to start thinking of how impossible it would be for some families to afford just this short ambulance ride. By comparison, an ambulance ride in Norfolk County, Canada usually results in out-of-pocket expenses of \$45.

When it comes to our health, we can't control what happens. So, we shouldn't be worrying about how a hospital bill will affect our finances when we need medical attention. In addition, the high cost of American healthcare may cause people to not seek out medical care in the first place. As someone who wants to work in the healthcare space, I believe strongly that no one should have to forgo necessary medical treatment simply because they cannot afford it.

A possible problem with free universal healthcare is that taxes may increase. This may not be the case for everyone. According to the Committee for Responsible Federal Budget, if free universal healthcare is implemented, taxes will go up, but out-of-pocket costs and employer-paid premiums would go down. Overall, median healthcare related costs are likely to fall. Right now, America is spending 20% of the money received from federal taxes (\$649 billion in 2019) on the military. If that number could be reduced by 1-2%, this would allow for a greater focus on the present wellbeing of American citizens. Another potential problem with free universal healthcare would be what would happen to private health insurance companies. A large number of healthcare insurance companies could be repurposed as government facilities dedicated to processing patient claims. In my ideal world, healthcare insurance would still exist, but as a government-funded entity.

Although my future career goals involve working as a healthcare provider or researcher, I feel very strongly about this issue and plan to advocate for universal free healthcare in any way I can.

Affirmations

By submitting this application, I affirm my understanding of and agreement to the statements found here:
<http://www.commonapp.org/affirmations>.

PREVIEW