



SAGINAW PUBLIC SCHOOL DISTRICT

STUDENT MEMBER OF THE BOARD

A Voice for Every Student. A Leader for Tomorrow.

Represent. Inspire. Lead



Essay Prompts

(Answer each in approximately 250 words.)

What is one significant issue facing students in our district today, and how should the Board address it?

One significant issue faced by students in our district is a lack of proper time management. This problem is applicable to homework, studying for tests / exams, and managing extra-curricular activities. Lack of proper time management prevents students from being able to reach their full potential and makes the task of carrying responsibility daunting. The Board should address this issue by making time management a necessary skill to teach, starting from elementary to high school. Being able to integrate time management lessons in class would help students as they grow older and venture into the job market. It is also a simple, yet effective decision that the Board can make, which would impact the lives of many students.

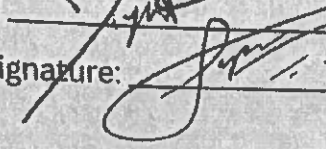
What do you believe is the role of the Student Member of the Board, and how would you contribute meaningfully in this role?

The role of the Student Member of the Board is to take personal experiences that I have faced as a student myself and share it to the Board, in order to help guide decision making. As someone who is quite involved in the student body, I have plentiful experiences and new perspectives to share with the Board. For example, I have thought of many problems that students in our district are facing and effective solutions for them as well. I have also explored ways to get student more interested in STEM / other art fields / english / history through experiences like science fair, national history day, and more. These experiences and fresh perspective would make me an excellent candidate for youth voice in the Board.

Certification

I certify that the information provided in this application is accurate and complete to the best of my knowledge.

Student Signature:  Date: 05/09/2025

Parent/Guardian Signature:  Date: 05/09/25

Submit Completed Application by Friday, May 17, 2025, to:

Dr. Mit Foley, Assistant Superintendent of Secondary Curriculum & Instruction

Email: mfoley@spsd.net

DIYA RAMAKRISHNAN

7061, Spring Lake Trail, Saginaw, MI | (989)-297-6987 | diyaramakrishnan009@gmail.com

EDUCATION

Sep 2023 - PRESENT

Saginaw Arts and Sciences Academy (SASA)

- High-School | Math & Science Concentration
- 4.0 Unweighted GPA | Languages: English, Spanish, and Tamil

SUMMARY

High school sophomore interested in research in the fields of machine learning, augmented reality, computational biology, and biotechnology.

RESEARCH EXPERIENCE

PRISM: Pancreatic mixed Reality Innovation for Surgical Management

- Developed a web-based browser and a Mixed Reality (MR) app to assist surgeons before and during pancreatic surgery.
- The web-based browsers uses U-Nets to segment the pancreas, liver, hepatic vessels and their respective tumors.
- The MR application uses a YOLO model for real time detection of nine major organs in pancreatic surgery and blood (even very small traces).
- Project was reviewed by pancreatic surgeons from Saginaw; most reported that the device can help reduce complication rates by 10 to 30%
- Project was a qualifier for ISEF 2025

Detecting Polyps in the Colon Using Machine Learning

- Trained a CNN to detect discrete polyps in the colon along with a YOLO model to localize and classify polyps as hyperplastic or adenomatous.
- Developed a web-application for this named PolypDetect that can handle both colonoscopy images and videos.
- Low-cost and quality product that can help balance the line between quality yet affordable healthcare.
- Project was selected the winner of the Michigan 8th District 2024 Congressional App Challenge winner and was presented at the Capitol.
- Project was selected as a finalist for the Oral Presentation at the 2025 National Junior Science and Humanitarian Symposium.

CREBBP as a Potential Therapeutic Target in ALS via Notch Signaling Pathway Analysis

- Identified that disruption of the Notch Signaling Pathway can lead to decreased expression of neuro-protective genes which can cause deterioration of motor neuron cells, a key driver in ALS.
- Completed this project as a group in correspondence with miRcore, a 501(c)(3) non-profit dedicated to democratizing research.

EXTRA-CURRICULARS

miRcore Volunteer Program (MVP)

- Took place in the 2024 miRcore R Programming and Machine Learning Camp, where membership to the miRcore Volunteer Program (MVP) was obtained and valuable skills into R programming and use of random forests was learned.

Chief Science Officer

- Chief Science Officer - program that enables middle and high school students to have a voice in promoting STEM in their community and school.
- Member of the Regional Leadership Council - small group of hand-picked Chief Science Officers from different schools that work together to train other Chief Science Officers and have a bigger voice in advocating for STEM in their communities.
- Started a news-paper club in my community to advocate for STEM research and display the interdisciplinary nature of STEM.

School-House World

- Online tutoring platform | Over 40+ hours tutoring students in the fields of Computer Science (neural networks), Pre-Calculus, Physics, and Enrichment (Spanish)

Michigan Youth Advisory Council

- Work under the Michigan After-School Partnership (MASP) to bring youth voice into perspective when passing policies for after-school programs.
- 1 of 23 students selected
- Receive a yearly \$1,000 stipend for work.

Carnatic Musician

- Have been studying Carnatic Music for over 9 years
- Performed at the Cleveland Thyagaraja Festival 4 times
- Performed on a podcast on the platform Mentza

RELEVANT COURSEWORK

AP Physics 1 (2024) - 5 on AP Exam

AP Calculus BC (2025)

AP Environmental Science (2025)

AP Physics 2 (2025)

G/T Biology (2024)

G/T Pre-Calculus (2024)

Python Course from MIT's Beaver Works Summer Institute [certificate of completion]

Medlytics (Medicine + AI / Data Science) Course from MIT's Beaver Works Summer Institute [certificate of completion]

MAJOR AWARDS

ISEF Finalist 2025 - Category: Translation Medical Science

Oral Presenter at 2025 National Junior Science and Humanitarian Symposium

2024 Congressional App Challenge Winner

ISEF Observer 2024

Top 300 Thermo Fisher Junior Innovator - 2023

2nd Place at School House World Hackathon - 2024

NCWIT High School Award Affiliate Honorable Mention - 2024

Honor Impact Award, x2 Merit Impact Award, Michigan Community Impact Award - UN Global for Volunteering Work

STUDENT BIOGRAPHY:

My name is Diya Ramakrishnan. I am a current sophomore at Saginaw Arts and Sciences Academy and am part of the math / science concentration. My interests focus mainly around STEM, but I love other interdisciplinary studies like art and history. As part of SASA, I have been exposed to many competitions such as the International Science and Engineering Fair, National Junior Science and Humanitarian Symposium, and the Congressional App Challenge. I have developed numerous apps, such as an app to help younger students with math and an app that can detect polyps from colonoscopies. I have also developed technologies to help in the medical field, such as my recent work surrounding a Mixed Reality Application for Pancreatic Surgery. Outside of science, I am a huge advocate for student voice in adult fields, as I work on the Youth Advisory Council for the Michigan Afterschool Partnership, receiving a yearly stipend of \$1,000 for my work. Being able to connect with other students and share my experiences with them, while also advocating for them, inspires me to be the person I am today.



May 14, 2025

Dear Saginaw Public School District,

I have had the honor of having Diya Ramakrishnan as a student at Saginaw Arts and Sciences Academy (SASA) and I have served as his principal. Andrew has been more than the ideal student, and she pushes herself to take accelerated courses. In order to achieve the highest grades and my deepest respect, she has demonstrated outstanding leadership and maintained a clear sense of purpose. She strives to perform at the top academic level. She is an upbeat, and positive person who tackles things head on and has no problems taking on leadership opportunities.

The academics at Saginaw Arts and Sciences Academy are most challenging, and during her time at SASA, she has fulfilled all the requirements with the added challenge of honors and advanced courses. In addition she has developed two Apps to help medical professionals.

Diya is a motivated student, who strives to do her best and is an excellent candidate for the Saginaw Public School District Student Member of the the Board. She is a true leader of tomorrow!.

Sincerely,

A handwritten signature in black ink, reading "Rachel A. Reid". The signature is written in a cursive, flowing style.

Rachel A. Reid

Saginaw Arts and Sciences Academy Principal

Student Member of the Board Recommendation Form

Applicant Name: Diya Ramakrishnan

Recommender Name: Ty Jarvis

Recommender Title/Position: Chief Science Officer Specialist

School/Organization: STEM@SVSU

Email Address: jarvisty04@gmail.com

Phone Number: (989) 780-5565

Applicant Qualities

Leadership Qualities: Excellent

Communication Skills: Excellent

Ability to represent diverse student voices: Excellent

Maturity and professionalism: Excellent

Ability to work collaboratively: Excellent

Critical thinking and problem-solving skills: Excellent

Empathy and understanding of others: Excellent

Responsibility and dependability: Excellent

1. How long have you known the applicant?

0-1 Year

2. In what capacity have you known the applicant?

I have trained, mentored, and worked closely with Diya through the Chief Science Officers (CSO) Program over the past year.

3. What qualities does the applicant possess that would make them an effective Student Member of the Board?

Diya possesses not only an exceptional intellect but also remarkable character. From our very first interaction, it was clear she is a natural leader, eager to step into leadership roles and consistently demonstrating maturity beyond her years. She is confident and articulate, willingly addressing large audiences with poise and professionalism. Even as a first-year CSO, Diya quickly emerged as a dependable role model, offering guidance and encouragement to her peers. She has a unique ability to uplift those around her, helping others feel seen, supported, and empowered. Her commitment to inclusive leadership and team success makes her an ideal candidate for the Student Board.

4. Provide a brief example demonstrating the applicant's leadership, advocacy, or impact within the school or community.

Diya's leadership and impact have been nothing short of inspiring. As part of the CSO Program, which emphasizes STEM advocacy and leadership, she has taken on multiple initiatives with excellence. One of her most notable achievements was her participation in the Congressional App Challenge, where she developed an app called PolypDetect—designed to detect cancer and other potentially acute medical conditions. Her innovation earned national recognition, and her work was displayed in Washington, D.C. Beyond this, Diya played a critical role with her team in organizing a STEM Career Fair at her school, coordinating with local STEM professionals to expose students to career opportunities and expand their knowledge of STEM fields. Her passion for advocacy and impact has left a lasting impression on her peers and the wider community.

5. Additional comments or observations that support the applicant's candidacy:

Diya has been an outstanding representative of her school and the CSO Program. Her determination and leadership have set her apart, earning her a place on our CSO Leadership Council in her very first year—an unprecedented achievement. She embodies the qualities of a servant leader: dedicated, responsible, forward-thinking, and deeply empathetic. Diya's proactive nature and consistent drive to create positive change make her exceptionally well-suited for a role on the Student Board. I give her my highest recommendation.

Signature: Ty Jarvis

Date: 05/12/2025

Saginaw Public School District

Student Member of the Board (SMOB) Recommendation Form

Applicant Name: Diya Ramakrishnan

Recommender Name: Lisa Moore

Recommender Title/Position: Teacher

School/Organization: SASA

Email Address: Lmoore@spsd.net

Phone Number: 989-573-0507

Applicant Qualities

Please rate the applicant in the following areas based on your knowledge of their skills and character.

Select one: Excellent, Good, Satisfactory, Needs Improvement, or Not Observed.

Characteristic	Excellent	Good	Satisfactory	Needs Improvement	Not Observed
Leadership skills		✓			
Communication skills	✓				
Ability to represent diverse student voices		✓			
Maturity and professionalism	✓				
Ability to work collaboratively	✓				
Critical thinking and problem-solving skills	✓				
Empathy and understanding of others	✓				
Responsibility and dependability	✓				

1. How long have you known the applicant? (Check one)

☒ 0-1 year

☐ 2-3 years

☐ 4-5 years

☐ More than 5 years

2. In what capacity have you known the applicant?

(e.g., teacher, coach, community mentor)

I am Diya's APPhysics2 teacher ~ I have also worked with Diya on her science projects and she often eats lunch in my room with her friends.

3. What qualities does the applicant possess that would make them an effective Student Member of the Board?

Diya is an excellent listener and she takes what she hears and asks excellent questions demonstrating her ability to think critically.

4. Provide a brief example demonstrating the applicant's leadership, advocacy, or impact within the school or community.

Diya's drive to make advancements in science has a tremendous positive impact on our school community. She leads by example - setting a high standard for her peers.

5. Additional comments or observations that support the applicant's candidacy:

Diya is an example of the forward-thinking, passionate, and highly motivated students that SPSP is shaping for our future. She would be a valuable member of the board.

Signature: Jim Moore

Date: 5-12-2025