

\*250 words max each\*

Pick a subject (hobby, interest, project or activity) that means a lot to you and describe the impact it has personally had on you and/or others.

Robotics is an activity that I love doing throughout the week. Since grade 9, I have participated in the FIRST Robotics Competition as a member of Team 1325. I enjoy learning how to engineer, program, and innovate. Robotics not only teaches me about STEM but also allows me to learn essential skills needed in my everyday life. Working on a drivetrain taught me many new things, like how a swerve drive gives you greater mobility than a tank drive. To add, I learned to be more confident and to trust in myself. Even if I may not be good at something, I can always improve with practice. For example, I didn't know what size the frame should be for the drivetrain to increase maneuverability, but with the help of the leads and other team members, I was able to learn. Robotics taught me the importance of collaboration; it taught me to use the word "we" to solve a problem or challenge, not "I." This project made me realize that working together is easier and more fun. Nowadays, whenever I see a problem, I don't try to tackle it by myself. Robotics also taught me to use all types of resources to find solutions, like looking through CAD videos online or asking for help from a senior member. I learned there are many ways to learn, and if you take the opportunity to explore, you will always find some help.

Tell us about a time you failed or struggled at something, or a time you overcame adversity. How did this experience help you grow as a person?

At the beginning of grade 9, I struggled to manage various extracurricular activities. I participated in extracurriculars that would help me grow. Such activities included volunteering, joining school clubs, and attending different events in my local community. However, I found it very difficult to juggle everything, as several activities conflicted with each other, causing me to miss meetings and events. This experience helped me realize that I not only need to manage my time more effectively but also need to plan out which activity is more important. I started using a calendar and writing out when each activity takes place, preventing my extracurriculars from overlapping with each other. I also used a technique called the Eisenhower Matrix, which was introduced by the French teacher. The way this technique works is that you organize your tasks in a 2 by 2 table, important vs not important and urgent vs not urgent. Ideally, the tasks at the top left of the table are the ones I would focus on and pay attention to first. Doing this allows me to rank which tasks I should put priority on and which ones I should do sooner. For example, to avoid sleeping late, I complete my homework before going to the JA Company Program for 3 hours on Monday evenings. Managing my time better allowed me to work more efficiently and therefore more effectively.

Tell us about a time you taught yourself something new. What did you teach yourself and what was your motivation? How did you go about your learning?

A skill that I taught myself was how to program in Python. Python is a famous object-oriented programming language that is used to build software. My dream for the future is to be a software engineer. I believe the software industry has a lot of potential, with a high employment rate and salary. I chose to learn Python because it is a user-friendly and easy language to start with. But, at first, I found it very hard and frustrating to learn Python because a simple error would cause the program not to function. For instance, when I tried working on a rock-paper-scissors game, I forgot to put an indentation for my if statement, causing the program to give me an error. However, my motivation to learn and to become a software engineer encouraged me to try coding new games. At my own pace, I went through various projects and hackathons in the GTA, allowing me to learn the basics and critical fundamentals clearly. In addition, by using resources like videos, I developed my skills and wrote more challenging code for every new project. Learning Python improved my responsibility, problem-solving skills, and independent work. At the moment, I am trying to challenge myself by doing the Canadian Computing Challenge to increase my understanding of Python further. Furthermore, I am expanding my horizon in the programming world through learning different languages, like Java, HTML, and C++.

Every day we come across problems begging for a solution. Think about a time when you, or a community you are a part of, recognized a problem. Then, think about the initiative you took to create a meaningful solution.

Identify the problem and who was most impacted by this issue(25 max).

Youth do not have equal access to work experience, which gives them a sense of responsibility and skills needed to prepare for adulthood.

How did you solve the problem?(250 words)

I found it very difficult to find work experience and skills that will prepare me for the future. So, I decided to start planning a website that would give high school students more access to employment opportunities. A friend of mine liked the idea, so I invited him to join the project. We decided to make a website where employers in the community could request any task like logo making, babysitting, or tutoring. Then, high school students could register on the website and find a task that they prefer. Once they complete the work, students will receive their pay after a commission fee deduction. Currently, I am programming the website using JavaScript, HTML, and CSS. At the same time, my friend is working on ways we can market the website in our school, like through posters. This website will allow youths to explore possible career paths while gaining a lot of experience and skills. They will also be able to develop a sense of responsibility and learn how to manage money. The website would also have a "learn-money" section, where students could read and learn ways to use their money effectively, like investing.

Learning at a young age how to be responsible and not waste money is very beneficial when turning into an adult. Therefore, by making this website, teens will not only be able to gain paid work experience, but they will also gain skills needed for their future.

What have you learned about yourself through your involvement with the partner(s) indicated?

How might Shad help you continue to grow in this learning?

Please provide your written response (100 words minimum and 250 words maximum)

(First Robotics)

First Robotics allowed me to learn and experience the world of STEM. I have been with the FRC team, Inverse Paradox, since grade 9, and through this team, I learned and improved my programming and engineering skills. By being part of the mechanical team, I was able to learn how to use different tools and equipment to make a national-level robot. It taught me why we should use a swerve drive rather than a tank drive. In addition, I was able to expand my knowledge in the realm of programming, especially in Java, through the various programming sessions that were done in the team. On the other hand, First Robotics also helped me develop my leadership, collaboration, and critical thinking skills, which will be very important in my future endeavors. It helped me learn to be more confident in myself and ask if I need help. SHAD will also allow me to explore and dig deeper into engineering and entrepreneurship. The program will give me the freedom to explore, create, and innovate. Through its hands-on learning approach, Shad will teach me STEAM-based solutions on how to face real-world problems and challenges. This program will also give me an opportunity to work with like-minded students and engage with academics and entrepreneurial mentors. Teaching me the value of my own perspective and the differing perspectives of those around me. Therefore, this summer program will give me a memorable experience that will guide my future endeavors.