

Joshua Frank

Explain how the student embodies the philosophies of Gracious Professionalism and Coopertition through the FIRST Core Values: Discovery, Innovation, Impact, Inclusion, Teamwork and Fun. Please provide examples.

FIRST's values define the leader Josh is: dedicated, compassionate, selfless, and engaging. Josh desires to make a difference on our team through his actions, truly living out FIRST's philosophies.

As a leader of build, Josh always aims to be inclusive and actively collaborates with over half of our team's members. Even as a rookie, he always looked to include others in his projects. For example, during match practices last season, Josh noticed our robot getting stuck on the game pieces. While Josh could have tried to solve this independently, he instead chose to collaborate with one of our seniors who tends to have difficulty fitting in. Josh's willingness to engage with all students makes our team more inclusive.

Outside of robotics, Josh is often seen helping other students in his classes. While Josh has never struggled with school, he notices how others in his class do. Josh cares for these people, tutoring them outside of school and helping them develop problem solving skills.

How has the student increased the awareness of FIRST? Describe the student's interests and/or plans to continue to engage with FIRST beyond high school. Please provide examples.

Prior to the COVID-19 pandemic, Josh had planned on helping organize our team's outreach events. Most notably, Josh was planning our yearly demonstrations at the Erie County Fair, where millions of people could learn about STEM programs in our community. Josh is extremely passionate about showing the community what FIRST is all about, and looks forward to doing it again soon.

After graduation, Josh plans to attend the Rochester Institute of Technology to major in Mechanical and Aerospace Engineering. He hopes to work at NASA's Jet Propulsion Laboratory, where he desires to be a leader in space exploration.

Furthermore, Josh looks to start a new FRC team in our area. It's often said that schools in Western NY have funding and support, but don't know how to get started. Having benefited from the program himself, Josh plans to return the favor to future generations. Josh looks to be the guide for these schools, and hopes to create more awareness of FIRST for local high school students.

Describe the student's technical expertise, entrepreneurship and creativity. How does the student's individual contributions to the team benefit the team as a whole in areas of fundraising, outreach, robot build, programming, etc.? Please provide examples.

Through his technical expertise and creativity, Josh is a problem solver and a leader. Last season, Josh worked diligently in our machine shop, becoming proficient in almost every tool imaginable. Josh's quick learning enabled him to creatively solve problems. For example, Josh was able to rapidly restore an old

shooter, which gave our programming team a head start on creating their auto routines. Building upon his knowledge, Josh also led the assembly of the final shooter design for our 2020 robot.

During competitions, Josh showed his ability to multitask, shadowing our pit crew and scouting over 30 matches. He saw how our team was stretched thin during competitions, and went the extra mile to help us succeed.

This season, Josh single handedly prepared and presented a Robotics 101 course aimed at teaching our rookies the fundamentals of FIRST Robotics. Josh also actively participates in our fundraisers, having raised hundreds of dollars through our digital fundraisers and bake sales.

Explain the student's leadership to their fellow team members. How do they motivate others? What is their leadership style? Please provide examples.

Throughout his tenure, Josh developed a leadership style of inclusiveness and enthusiasm. His eagerness to lead manifests itself in multitudes of problem-solving opportunities. For example, after running practice matches last season, Josh noticed our shooting motors were becoming extremely hot and disrupting our accuracy. Because of this, Josh developed and built a cooling system for these motors, which we used between each match. Furthermore, Josh worked with our CAD team to improve our robot's acquisition after discovering it to be ineffective.

This season, Josh is one of the students leading our innovation challenge submission. He and a few others were able to motivate our team to submit for the award, and turned it into a fully student driven activity. Josh and his team organized student recruitment, and created an action plan to tackle their submission. Josh's leadership extends beyond these few examples, as he's a motivator for his fellow teammates and will be for years to come.