

FRC Team 6377

Submitted Awards Binder



Team 6377: Howdy Bots 2025 Woodie Flowers Award: Jay McNelly

Jay McNelly has consistently exemplified the spirit of mentorship, leadership, and empathy that Dr. Woodie Flowers championed. Since Jay joined our team as mentor, he has not only advanced the paths of many students, but he has also more than positively impacted our own personal journeys in leadership. Jay is remarkable because he has great patience and is easy to approach. However, what sets him apart is his comprehension of technical skills and emotional intelligence.

Jay's expertise in mechanical systems is a very valuable resource for many students on the team. For many rookies, using machinery for the first time is scary, but Jay's genuine, patient explanations helped our students gain the confidence to continue learning more about robotics. He creates a space where everyone feels that they can safely learn from mistakes while learning and they can contribute to the team with any level of experience.

However, what distinguishes Jay as a mentor is this: he manages to create a safe atmosphere and has the tremendous ability to inspire confidence in his students. When students reach a good level of proficiency Jay would take a step back and allow them to take initiative, lead, and teach one another creating an environment for leadership development. It builds not only technical skills but also enforces leadership qualities, which gives rise to students who can excel in what they pursue and maybe even become mentors themselves.

Jay's impact as a mentor extends outside of the shop through the support he provides for his students. One year at an event, a student was having a hard time with something personal and it really started to negatively affect their ability to compete. While other mentors may have seen this struggle and just let them be, it was Jay who approached the student, telling them that it was okay to take their time and that if they ever needed to talk he would be there to listen. Such a response was a powerful statement of acknowledgment of their feelings during that difficult time. Jay's view of the student is not that of technical field training but of respect, the respect for their feelings has been nurtured in an environment in which all team members feel that they can be themselves, ask questions, and seek affairs without being judged, irrespective of gender or background.

Jay's approach to mentorship is about offering technical advice while building trust and communication within the team. Jay does not only teach students how to build robots, but he teaches students how to build confidence, trust, and resilience. Because of Jay's mentorship, he leads us to further the skill set necessary for leadership, gives us accountability and pride in our skills as well as compassion as leaders. The influence extends far past the things in the shop; it builds us to become better people towards our careers and communities. For all these reasons, we are proud to nominate Jay McNelly for Woodie Flowers.

Team 6377: Howdy Bots 2025 Dean's List Semi-Finalist: Jay Kinvig

Jay embodies the FIRST Core Values in all aspects of their life, not just at team meetings or at events. They are always willing to learn, try new things, and enjoy teaching their skills to newer students as well as working alongside them collaboratively. As our percentage of female students grew, they proactively asked if they could place and stock feminine hygiene products in our shop's bathrooms to help all genders feel more comfortable in the shop. Jay also loves to participate in our community outreach events, and speaks passionately about our team and FIRST's values to all who stop by. Jay also loves to have fun, whether it's participating in karaoke or games during team-building nights, or helping plan the occasional prank / gift for some of our close FRC team friends at events.

Besides evangelizing FIRST at our outreach events, Jay is our first international Howdy Bots ambassador. Having dual citizenship in Canada, during the summer of 2023 Jay attended FIRST in Canada's Girls and Allies Youth Summit and won a Gracious Professionalism award, then went on to Kettering University's FRC Leadership Summer Camp, and even convinced Karthik Kanagasabapathy to record a brief segment for the Howdython, our annual fundraising telethon. Jay's plans upon completing their homeschool graduation requirements include a medical sciences program at the University in Ontario-Canada, with the eventual goal of providing OBGYN services to rural communities. Jay is planning on mentoring FRC while at the University and beyond.

In addition to their above contributions, this year Jay is one of our two lead manufacturing students, creating custom machined parts on our lathes, Shapeoko, and our HaaS CnC. Jay has been a lead contributor and emcee for annual Howdython streaming fundraiser every year they've been on the team, and was one of the lead writers for all of the live segments last year. This year Jay is one of our official student leaders as our Competition Readiness Coordinator, which carries the large responsibility of ensuring the team is fully packed with required tools and spare parts, trained and practiced for talking to Judges, and ready for every aspect of competition except for the actual robot! Jay also willingly takes on the role of a student advocate for anyone who may be shy to raise a concern.

Jay's primary technical contributions to the team fall in fabrication and assembly. On our HaaS and Shapeoko CNC, they will take completed designs and models from our CAD students and utilize Autodesk Fusion 360 to generate toolpathing routines and run the machines to completion, while on our lathes Jay routinely creates precision parts from their CAD drawings. While not part of our full CAD design team, Jay also has a working knowledge of Onshape so they can ensure parts are manufactured to the needed tolerances and help the CAD students ensure their parts are created with an eye towards assembly and serviceability. For the past two years, Jay has also been our primary bumper designer and manufacturer, creating strong designs that have survived all events. Jay's natural leadership style follows our "see one, do one, teach one" methodology for mentoring, where they are happy to take students wanting to learn a particular skill under their wing, demonstrate how to perform a task and where they may have issues, watch the student do it several times offering guidance and tips as they learn, and then watch them train someone else to further get mastery on the topic. They do well keeping students motivated on their tasks, and also ensure that everyone feels comfortable contributing, asking questions, and providing alternatives instead of shutting ideas down. Outside of FRC, Jay is the head of the Outreach Committee of Generation SERVE's Teen Advisory Board, and has earned the national President's Volunteer Service Award every year since 2015.

Jay has a passion for volunteering with various community non-profits including visiting seniors, helping kids in foster care, and serving meals to neighbors who are homeless. With their sister, Jay started a yearly Halloween food drive, donating 4868 lbs of food to El Buen and Hope Food Pantry since 2017. A lifelong homeschooler who's also taking honors classes and coop/dual credit at Austin Community College, they've maintained a 98.25% average in 2024's honors classes and a 4.0 GPA at ACC.

Team 6377: Howdy Bots 2025 Dean's List Semi-Finalist: Rhys Buckland

Rhys' leadership skills have grown dramatically through his experiences with FIRST, and during our internal Robot Rodeo game we played during the offseason he was able to demonstrate them as the lead of one of four mini-teams, designing a robot for an in-house competition. As his team's leader, he did a great job documenting the progress made during each meeting so vacationing students didn't fall behind, and had a can-do approach for solving problems with his teammates, enjoying the challenge of trying something new and never showing frustration if ideas didn't work the first, second or fifth time. He was also always eager and willing to help the other three teams if they were struggling or needed an extra pair of hands due to student absences.

Rhys enjoys attending our outreach events and talking about the Howdy Bots and FIRST, and he has a particular gift for interacting with younger students. He'll often get on his knees when talking to younger kids to show what the parts of the robot do, letting them touch the pieces so they're not afraid, and he does a great job explaining complex things so the youth can understand and see the fun of robotics. Rhys also regularly volunteers at our biannual STEM Rodeo Night, where parents can leave their 1st-5th graders in our care for 3 hours while we rotate them through various stations like Scratch programming an XRP robot or generating musical tones with SnapCircuits. During college, he wants to mentor a local team and give back to the FIRST community that has provided him so much.

Building on his Robot Rodeo leadership experience, this year Rhys applied for and was accepted as the lead of one of our robot mechanism subteams, and is currently leading our Ascender subteam. Each subteam has a full combination of CAD, Mechanical, and Programming students allowing them to deliver their mechanism as an integrated product, and Rhys' skills with prototyping, manufacturing and electrical have resulted in a lightweight elevator system capable of receiving coral from the intake subteam and scoring on all levels of this year's reef. He's also contributed to the wiring and cable management of our drivebase and ensuring the robot is following the updated wiring and placement guidance for the use of this year's new radio.

Rhys started with VEX in middle school before moving to FRC in high school, and has at least two years of experience running every machine in our shop except for our HaaS, which he tries to get some experience with as time permits. His high-school plans are very engineering-focused, including taking Robotics I, Diversified Manufacturing, and AP Computer Science this year followed by Robotics II and Precision Metal Manufacturing I next year. For fun, he's even building a go-kart during his school lunch breaks and comes to meetings with stories of how fast they got the kart around the back roads of his school. FIRST has helped Rhys find his passion for electrical work, and plans on taking that forward through an Electrical Engineering major at the University of Texas – San Antonio. Rhys is a very collaborative leader, always seeking input and willing to discuss the pros and cons of any idea so his teammates feel included and feel ownership in the success of their task. He comes at life with a very relaxed attitude: if something goes wrong or someone makes a mistake, it doesn't get him down. Instead, his reaction is more likely to be "Hmm, well, that didn't work, what can we do better this time?" That attitude holds true even if he's the one who made the mistake, in which case he's always willing to admit it, learn from it and move forward, which serves as a great example to his teammates. Often the biggest motivation he gives his teammates is just watching the near-constant smile he has as he's working on something or helping someone learn a skill.

In his first two years of balancing high school with FRC Rhys maintained a B average overall, but this year his focus has demonstrably gone up and he has an A average while maintaining almost a 90% attendance rate at Howdy Bots meetings. During his free time he works out in his home gym, and hangs out with friends at home or in group activities like bowling, roller skating or ice skating. He's even growing some culinary skills, cooking dinner for his family at least once a week.