



First Tech Challenge 7842 Browncoats



About Us

The Browncoats are a community *FIRST* Tech Challenge robotics team from the Huntsville, Alabama area. Currently, the team is made up of six students - four girls and two boys - ranging from 8th to 12th grade. Between them, these students represent an area covering 250 square miles of North Alabama.

The Browncoats evolved from the *FIRST* Tech Challenge team, 12-Volt Ninjas, which was formed in 2011. In 2013, members from the *FIRST* Lego League team, Acronym, were brought in, and the team name was changed to Browncoats after a favorite science fiction television series, *Firefly*.

Firefly was an American space western series which originally aired in 2002. It was set in the year 2517 and follows the adventures of the renegade crew of *Serenity*, a "Firefly-class" spaceship. Although the show only lasted one season, fans worldwide call themselves Browncoats in allegiance to the Independents who waged a failed civil war against the Union of Allied Planets. The Browncoats' competition robot is named Vera after one of *Serenity*'s crew member's favorite "tool".

2017-2018 was a learning year for the Browncoats, with half of the team starting as rookies. Regardless of the challenges, the Alabama State Championship saw the team selected as an alliance partner in the final elimination matches, taking first place for the Motivate Award, second place for the Think Award, and third place for the Inspire Award. In addition, one of our team members, Ian, became a Dean's List finalist.

Goals and Mission

This season, the Browncoats adopted the following mission statement:

For the 2018/2019 season, the Browncoats will work to spread *FIRST* and *FIRST* Tech Challenge throughout Alabama by participating in community outreach, by reaching out to local schools, and by providing mentors to new teams.

For the Rover Ruckus game, our goal is to build a robot designed to perform every aspect of the challenge through team work and the application of engineering design principles. We plan to compete in local scrimmages, Arkansas qualifiers, the Alabama State Championship, and hopefully to qualify for the World Championship with the overall goal of improving on our best ever standings.

Engineering the Robot

Over the past several seasons, the Browncoats have employed an engineering process that features brainstorming, subsystem partitioning, and a divide-and-conquer approach to conceive, design, build, and program the robot while utilizing the talents and skills of each team member. In addition to robot building, students also collaborate to document their journey in an Engineering Notebook and on social media.

Outreach

Connecting with the local community through outreach is important to the Browncoats. The scope of that outreach has recently been broadened to include area schools, churches, businesses, and more of the local engineering community. Over 800 hours of outreach have been accumulated so far this season at the following events:

- Community Informational and Recruiting Meetings held at local city libraries
- Volunteering at NASA's Rover Challenge
- U.S. Army Missile Defense Agency's Take Your Child to Work Day
- Hosted the 2018 Rocket City FTC Invitational post season competition
- Huntsville Library's Brickapalooza
- Hosted an FTC Robotics Programming Class
- Space & Missile Defense Symposium
- Huntsville SteamWorks *FIRST* Open House
- Volunteering at the Huntsville Hamfest Youth Lounge
- AUVSI Pathfinder Symposium
- 2018 Rocket City Nerdcon Discussion Panel Presentation, "Robots in Space - a *FIRST* Tech Challenge Overview"

TEAM MEMBER INTRODUCTIONS



Ian
Programmer
Builder
CAD
Driver



I'm in 11th grade, and this is my 3rd year with *FIRST* Tech Challenge (FTC) and the Browncoats. I do software and CAD on the Browncoats. I'm willing to learn any skill to help the team. FTC has helped me pursue my interests and has exposed me to new skills I never thought I'd need or enjoy. FTC has also helped me express my ideas more clearly, and communicate more easily with others. I love physics, astronomy, video games, coding, reading, and PC building in my free time.



Megan
Builder
Driver
Social Media
Engineering
Notebook



I'm in 11th grade, and I have been homeschooled since pre-school. Robotics never really interested me that much until I went with my brother to one of his competitions and realized just how great it is. Now I can't stop thinking about it! I love doing anything I can to help out the team with everything they need. My main interests are building, social media, editing videos, and the engineering notebook. I'm a published author and love writing in my free time, along with reading, playing video games, listening to music, and acting.



Brooklyn

Builder
Programmer
Driver



My name is Brooklyn. I'm an 8th grader at Buckhorn Middle School. This is my second year with *FIRST* Tech challenge and the Browncoats. I was on a *FIRST* Lego League team for 2 years before I joined the Browncoats. If you want to know who I am, I'm that quiet person who lurks in the shadows and can only be seen when wanted to be seen. I like to do robotics, read books, draw, and ... read more books.



Jalynn

Engineering
Notebook
Team
Reporter



My name is Jalynn, and I'm a homeschooled sophomore. I did *FIRST* Lego League in fifth grade and instantly fell in love with robotics, but scheduling problems prevented me from joining another team until now. I am willing to help in any area needed on the Browncoats. I'm interested in Engineering Notebook, building, and possibly programming. During my free time I like reading, writing, listening to music, and talking (or hanging out) with my friends.



Kye
Photographer
Videographer



Hi, I'm Kye. This is my first year on a robotics team. I love drawing or reading in my free time. I am homeschooled, and I am currently in the 12th grade. I thought robotics looked fun, so I decided to join a robotics team. I hope I can help the team in any way I can.



Joel
Builder
Driver



My name is Joel, I'm 15 years old. I am in 9th grade, and I like to build and try to make people laugh (even with dumb jokes.) I like to do math (if it is not a word problem.) I was previously on robotics team 13808 The Time Travelers. I am a builder on this team and I am enjoying it.



Jayne Weeble
Marker, Mascot

Hello! My name is Jayne Weeble, and I am the team marker and mascot for FTC 7842 Browncoats! This is my first year with the team, as I was only born a couple of days before writing this. Even so, I love to help out the team with anything I can! I'm always there to give them a thumbs up when they need boosting—even if I don't have any thumbs—and I'm always around for when they need me!

MENTOR BIOGRAPHIES



Jeff Stewart

Current Position: Coach

Years with the Team: 4

Jeff has served as the Coach to FTC team, #7842 The Browncoats, for four seasons. He has been introducing the team to some of the principles of engineering project management, including project bounding, requirements generation, partitioning, and project scheduling. In addition, he is mentoring the build team and has taken a special interest in the 3-D modeling and printing activities.

Jeff received a B.S. in Electrical Engineering from the University of Arkansas in 1985. Since then, he has worked as a Software Engineer at Texas Instruments, Raytheon, and SAIC serving in both technical and team leadership roles. He enjoys tinkering with a never-ending list of home improvement projects, wood working, flying (he holds a private pilot's certificate and at one time owned his own airplane), and reading science fiction.



Chuck Holbrook

Current Position: Coach/Chief Schmoozer

Years with the Team: 3

This is Chuck's first year as a Coach for the Browncoats, specializing in mathematical solutions and fundraising but this is his third year to be involved with the team. Currently, he is an Instructor of Mathematics for Calhoun Community College in Decatur, Alabama among other schools. Chuck's son and daughter are part of the team again this year. Chuck earned his BS in Mathematics from Athens State University, his MS in Mathematics and Education from Alabama A&M University and post graduate work at the University of West Alabama.



Monte Bateman

Current Position: Mentor

Years with the Team: 6+

Monte has mentored the Browncoats and their predecessor, the 12V Ninjas, for 7 years. His 2 sons were members on those teams. He has been helping them work through the design process and to help them quickly assess and prioritize their multitude great ideas for design.

Monte earned a Ph.D. in Physics from the University of Oklahoma. He has taught physics, weather, and engineering for 30 years. His specialty is instrumentation design under tight constraints, which serves well in FTC. He has created large systems, both hardware and software, doing lightning research at NASA.

Monte's main job with the Browncoats is to ask, "But what about....?"



Jean Bateman

Current Position: Administrator, Scouting

Years with the Team: 6+

Jean graduated from The University of Oklahoma with a Bachelors degree in Clinical Laboratory Science. She worked in the health care field for 16 yrs. Including 9 years at Oklahoma Memorial hospital, where she helped teach and train students from The University of Oklahoma Medical School / Health Science Center. Her background includes medical microbiology, toxicology, chemistry, hematology and biology. She has taught elementary, middle and high school science classes to home-school students for the last 12 years.

Jean has been a part of *FIRST* for 9 years. Helping with 2 FLL teams before joining FTC. She has been with associated with FTC for 7 years and the Browncoats for 5 years. Her main job is fund-raising, managing the 501c3 and purchasing robot parts for the team. Favorite line from the team is “ Ms. Jean do we have money to buy.....”.



Cindy Stewart

Current Position: Engineering Notebook/Fundraising/Travel Agent/Scouting

Years with the Team: 5

Cindy's background is in the legal field, having worked as an administrative assistant/paralegal at law firms for many years. Her main role on the team is the Engineering Notebook mentor. She also helps with fund-raising, the team's travel plans, and scouting at competitions. This is her fifth season being involved in *FIRST* robotics and the Browncoats, and she loves being part of the team. She enjoys the excitement of competition and watching how the students grow in skill, character, and confidence.



John Bateman

Current Position: Student Mentor

Years with the Team: 6

This is my second year functioning as a mentor. I was the head builder and team captain for the Browncoats 2016-2017 season, helping lead our team to Worlds. I have participated in FLL for 3 years and 4 years in FTC. The experience I gained participating in *FIRST* help determine my future path. I am currently attending the University of Alabama-Birmingham pursuing a degree in Biomedical Engineering. I am looking forward to working with the team and helping the Browncoats continue in their journey of building robots.



Ryan Stewart

Current Position: Student Mentor

Years with the Team: 5

I am a student at University of Alabama in Huntsville and am studying mechanical engineering. This is my third year as a Student Mentor, having spent two years with *FIRST* Tech Challenge and the Browncoats. I was one of the builders and drivers on the team and am involved with CAD and 3D printing. Besides robotics, I enjoy playing video games.



Tala Thompson

Current Position: Student Mentor

Years with the Team: 6

I've been programming on a *FIRST* team since I was 10 years old, starting with *FIRST* Lego League's Smart Move. I was a founding member of the Browncoats in 2013, with Block Party. I learned a lot on the team, and I was the lead programmer by the time we made it to the World Championship for Velocity Vortex. This is my second year going to University of Alabama in Huntsville for Computer Science. I've been coaching the team ever since I graduated, though I haven't been able to make it to as many meetings as I wanted to, and I plan to volunteer at several *FIRST* events this year. It's been fun so far watching the team learn new things, and they're already working on stuff I never got a chance to do while on the team.

