

WHAT IS COUGARS GONE WIRED?

Cougars Gone Wired (CGW), FRC Team 2996, is not just a name and number, but a model of connection, advocacy, and STEM education. Whether someone is a middle schooler at our summer camp, a fellow FRC student attending our scrimmage or business exchange, or even someone in another country streaming our YouTube videos, they know we are working to build a better future. Our team's involvement in and creation of events, programs, and projects inspires interest in engineering and robotics, demonstrating our dedication to our community.

WE ARE A STRONG COMMUNITY

We jump-start our members towards life after high school by structuring our team like a modern industrial business. With a CEO and 12 Vice Presidents leading technical and business subteams, students have a variety of opportunities to hone their leadership skills in preparation for the workforce. We select the best candidates based on merit by requiring students to write a cover letter, submit a resume, and interview with a panel of mentors.

Involvement in our team supports our district's robust Career and Technical Education (CTE) program. Over 79% of our members participate in and leverage the knowledge and skills they gain in these vocational engineering and business classes.

We are the only FRC team in our school district. However, we actively recruit students from outside our district (including homeschoolers) to draw in a diverse group of people in Colorado Springs and its surrounding regions. The richness of thought and diversity that comes from our many different backgrounds, talents, and viewpoints enables us to approach problems with new perspectives. We accept anyone as a member, including those with various physical and mental challenges, and find a place for them to thrive. No matter their previous experience, each student gains hands-on skills and expanded confidence; CGW strives to create inclusion on our team.

WE ARE STATE ADVOCATES FOR STEM

We also pursue inclusion in our state as a whole. To create this level playing field, we established a legislative advocacy initiative in 2023 called Cents for STEM to secure funding for new and financially challenged robotics teams. This initiative will use money from the Colorado Department of Education fund to create equity for all robotics programs in the state. Last season, we found a representative to support our project, but because recent elections have changed Colorado's political leadership we are now developing new contacts in the legislature. Learning from our struggles last season, our students crafted a bill this year to expedite the process as we communicate with representatives. We are working not only to move our state's robotics community towards equity, but to provide our students with real experience in our state legislative system, creating empowered and confident citizens determined to make a difference.

Beyond the original intentions of the Cents for STEM initiative, we increased inter-team communication and gained support for the bill throughout the United States by sharing information about the initiative. We forged strong relationships with a myriad of FRC teams as

far away as Washington, who now exchange technical ideas and brainstorm business endeavors to support each other throughout the season.

WE ARE FRC TEAM SUPPORTERS

Every year since 2012, we have built a full-sized competition field, modifying the *FIRST*-provided team plans to match the dimensions and functions of an official field. As the only team in the state who builds and shares a field, we host the Colorado Scrimmage, a week-zero mock competition in which we invite all FRC teams in the region to participate in practice matches. In 2024, more than 20 teams attended and had full access to our facilities and tools, enabling repairs and adjustments to robots as teams put their designs to the test in a low-stakes environment.

The field is assembled at our high school every weekend for local teams to use during competition season, and we transport, set up, and manage it at the Denver Regional, which we have done since 2014. We have also provided and directed a field for the Kendrick Castillo Memorial Tournament (KCMT)/Energy Days for the past four years. Not every team has the resources to build such a field, so we ensure an opportunity for practice, design iteration, and competition experience.

WE ARE ROLE MODELS

We not only support members on existing robotics teams, but we inspire a passion for STEM in kids before they reach high school through classes and clubs. Nearly 70% of the elementary schools we connect with are Title 1 schools with a large Hispanic population, so our outreach efforts serve an important role for our diverse population. Our demonstrations, reaching 16 schools in the past 3 years, benefit students who may not otherwise have exposure to STEM education programs, providing a path for our future engineers.

CGW participates in community events, such as the Festival of Lights, our school's Homecoming Parade, West Fest, the Jackson Elementary Trunk-or-Treat, the District 11 Elementary Robotics Competition. We also contribute without our robot, through building wooden gliders for an elementary school class, serving the Divine Redeemer dinner at the Elks Lodge, and volunteering to clean up trash.

Since 2013, we have been invited to the Cool Science Carnival, an exhibition for science and technology geared towards elementary and middle schoolers. Over 8,000 people attended the 2024 event, where we offered kids a chance to play catch with our robot and play remote-control soccer with others. Throughout the day, we explained to attendees how we design and build the robot, as well as what opportunities are available in *FIRST* for elementary and middle school students.

Because our booth is often a first introduction to STEM for many kids, we work hard to make it fun and memorable. We also use this event to give parents age-appropriate resources for their children to participate in STEM activities. The president of Cool Science, Ron Furstenau,

says 2996 “students are seen as role models for the kids that attend Carnival Day. The kids get to see the types of things that they can do in STEM when they grow up.”

WE ARE MENTORS

We believe that involving younger generations in STEM and engineering is crucial to our future, so we have taken measures to ensure them access and opportunities to explore these fields. Our Making A Difference (MAD) Summer Camp has sparked interest in technology for middle schoolers since 2016. The curriculum—written by 2996 team members—teaches the full extent of the engineering process and *FIRST* values. In 2024, 28 middle schoolers learned teamwork and leadership from student mentors in a week-long build season. Twenty-four MAD graduates have joined CGW so far.

After welcoming returning campers year after year, we decided to broaden the camp and add more difficulty. For the first time this summer, we ran two weeks of camp: Level 1 and Level 2, designed to make the experience more impactful for all participants. This second week was a resounding success, with 9 new campers diving deeper into robot and programming challenges.

WE ARE WORLDWIDE COMMUNICATORS

Our constant improvement and growth stretches notably into our YouTube channel, which has dramatically lengthened our reach over the past two seasons. Originally, we posted montages of our events specifically for the FRC community, but we wanted to be more engaging and informative for everyone—regardless of *FIRST* experience. Now, our videos provide insight into what *FIRST* is and how our team approaches each year’s challenges, which makes our media more understandable and personal. Our channel is now viewed in 18 countries and has increased 13-fold in average views per video. We continue to improve our content to become a more effective outreach tool, creating global appreciation for the *FIRST* community and the engineering process.

WE ARE BUSINESS PARTNERS

Our team is immensely grateful to our sponsors and the support they provide us, so we work to include them in our team’s activities. We run an annual Parent/Sponsor Dinner where we unveil our robot and tell the story of the season, highlighting how their contributions assisted the team. We give presentations to sponsors (such as L3Harris Technologies) showcasing our robot and explaining how our team is structured for success.

We host the National Association of Women in Construction (NAWIC) January meeting in our facilities where we present our current plans and give tours of our shop. NAWIC is a strong sponsor who provides building materials as well as business connections, which create new opportunities for us through potential sponsorships and internships for the team.

WE ARE COUGARS GONE WIRED

CGW extends our efforts beyond our classroom walls, cultivating our members into confident, active citizens, building an enthusiastic, STEM-oriented community. Our team is dedicated to constant improvement and growth—qualities we will develop and share far into the future. We approach every challenge head-on with optimism and strength—improving ourselves to improve the world.