

**2024 Procter & Gamble
Peachtree District Qualifier Albany**

PRESENTS

CRESCENDO SM

PRESENTED BY 
Gene Haas Foundation

March 28th – 30th, 2024
Albany Civic Center
100 W Oglethorpe Blvd
Albany, GA 31701



Georgia**FIRST** Robotics

www.gafirst.org

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Welcome to the Peachtree District Albany event!

Greetings to our teams! We look forward to seeing how you solved this year's *FIRST* Robotics Competition (FRC) challenge, Crescendo! This event marks the culmination of months of hard work, creative problem solving and incredible teamwork. Here, on the arena floor, you will test your design, strategy and fabrication skills. You have learned what it means to be part of a team and you have contributed to its success. In the spirit of Gracious Professionalism®, your opponents will become your friends and colleagues – for years to come.

To all our volunteers, mentors, teachers, and parents: thank you for your year-round support to create this outstanding opportunity for our students. Your investment of time and energy has been significant and you have served as terrific role models. You have positively impacted this next generation of innovators, educators, engineers and leaders and you should be proud of your accomplishments!

To all our sponsors and partners: you play a critical role through your commitment of funding, volunteers, internships, and leadership. You know the importance of a workforce that is technically astute, innovative, and energized and recognize that *FIRST* participants are the future workforce that keeps our country competitive in the global economy. The Peachtree District Albany Qualifier Event and all *FIRST* year-round STEM related activities have been made possible thanks to your support!

We invite everyone to join us in cheering for these students as they exhibit lessons and skills learned over the past several months. Watch them compete on the arena floor and visit them in the pits. Talk to them and congratulate them! They are all winners! They are our future!

On behalf of the leadership of Georgia*FIRST* Robotics, we wish all participating team members great success, volunteers amazing fun and spectators super charged excitement! Best of luck to everyone!

Good luck teams!

Rob Collins
Chair, Local Planning Committee
Neos

Jason Beaver
Event Manager, Local Planning Committee
Neos

Brian Cooksey
President, Georgia*FIRST* Board of Directors
Shaw Industries

Connie Haynes
CEO
Georgia*FIRST* Robotics

Jan Spurlin
Chair, Georgia*FIRST* Leadership Committee
Service Now

Chris Cortez
FRC Program Delivery Partner
FIRST South Carolina



PRESENTED BY **HAA5**
Gene Haas Foundation

Albany District Event Schedule*

(Day 0) 3-28-24

5:00pm - 10:00pm
7:00pm – 7:30pm
7:30pm – 9:00pm
9:00pm – 9:30pm
9:45pm
10:00pm

(Day 1) 3-29-24

8:00am - 10:15am
8:00am - 9:00am
8:30am – 9:00am
9:00am – 9:30am
9:30am – 10:00am
10:30am - 11:00am
11:00am - 1:00pm
1:00pm - 2:00pm
2:00pm - 7:00pm*
7:30pm – 9:00pm
8:00pm*

(Day 2) 3-30-24

8:00am
9:00am - 9:30am
9:30am - 12:30pm
12:30pm - 1:00pm
1:00pm - 2:00pm
1:30pm
2:00pm - 5:00pm
2:30pm*
5:30pm*

Thursday

Teams Load In, Pits Open, Inspection
Calibration & Measurements on Field
Test Matches for Day 0 Load In Teams
Calibration & Measurements on Field
Load-In Closes
Pits & Venue Close

Friday

Pits Open, Inspections
Load-In
Calibration & Measurements on Field
Drive Team Meeting (on-field) & Safety Meeting (TBD)
Test Matches for Day 1 Load In Teams
Opening Ceremonies
Qualification Matches
Lunch
Qualification Matches
Team Social (at 4C Academy)
Pits Close

Saturday

Pits Open
Opening Ceremonies
Qualification Matches
Alliance Selections
Lunch
Load Out Begins
Playoff Matches & Awards Ceremony
Practice Field Closes
Pits Close

*Scheduled times are subject to change based upon run schedule, field issues, or other factors.

Registered Teams

1261	Robo Lions	Suwanee, Georgia
1414	IHOT	Atlanta, Georgia
1771	North Gwinnett Robotics	Suwanee, Georgia
2415	WiredCats	Atlanta, Georgia
3329	Wildbots	Kingsland, Georgia
3344	Space Dragons	Fayetteville, Georgia
3635	Flying Legion	Warner Robins, Georgia
4112	EagleBots	Cumming, Georgia
4240	TroTek Warriors	Albany, Georgia
4459	Leo Techs	Lithia Springs, Georgia
4468	LINKS Robotics	Atlanta, Georgia
4509	Mechanical Bulls	Sugar Hill, Georgia
4730	Terminators	Albany, Georgia
5074	RoboMustangs	Norcross, Georgia
5219	TeknoSquad	Atlanta, Georgia
5828	Flying Riots	Albany, Georgia
5848	ROBO C3	Edison, Georgia
6023	DISCBOTS	Atlanta, Georgia
6829	Ignite Robotics	Suwanee, Georgia
6905	Raiders of the ARC- TEAR-A-BYTE	Alpharetta, Georgia
6919	The Commodores	Albany, Georgia
6925	W.A.Robotics	College Park, Georgia
7104	Bot Brothers	Savannah, Georgia
7470	iRAMBOTS	Sylvester, Georgia
7514	EVE Robotics	Atlanta, Georgia
7676	THS RoboDogs	Thomson, Georgia
8815	Barnstormers	Statesboro, Georgia
8849	Storm Robotics	Alpharetta, Georgia
8872	NSBE SPECIAL OPS	Snellville, Georgia
9260	Built4Bibb Robotics	Macon, Georgia

The Ultimate Sport for the Mind!

EVENT SPONSORS



THANK YOU FOR MAKING THIS EVENT POSSIBLE!

Georgia**FIRST**Robotics

2024 Sponsors

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Georgia Tech	Georgia United Credit Union
Google	Gwinnett County School District
Johnson Research & Development	Kennesaw State University
Kimberly-Clark Corporation	Lockheed Martin
Mercer University	Milner
Muscogee County School System	NCR Foundation
Neos	North Georgia EMC
NWGA College & Career Academy	Novelis
PPG Foundation	Procter and Gamble
Shaw Industries	Southwire
UPS	Verizon
4C Academy, Albany	

***THANK YOU FOR YOUR SUPPORT OF
GEORGIAFIRST AND THE PEACHTREE DISTRICT!***

Event Judges

Rob Collins, Neos, Event Lead Judge

Bryan Haynes, State Lead Judge, Kimberly Clark

Alex Alochukwu, Albany State University

Michelle Bergozza, Dougherty County School System

Frank Borowiec, Retired

Tom Cleveland, Inspire Brands

Brian Cooksey, Shaw Industries

Jose Luna

Amr Mashaly, Procter & Gamble

Ron Pleasant, Muscogee County School System

Tina Peterson, ComNet Technical Solutions

Jim Shaw

Brad Spivey, Procter & Gamble

Heidi Tennison, Procter & Gamble

GeorgiaFIRST relies on dedicated volunteers and appreciates the contribution of time from everyone who participates. From the expertise of veterans who return year after year, to the enthusiasm of rookies, volunteers are the critical component that makes our events successful.

**YOU inspire. YOU motivate. YOU influence. YOU transform lives.
For this we say THANK YOU!**



2024 Game Description

In CRESCENDO presented by Haas, two competing alliances are invited to score notes (game pieces), amplify their speaker, harmonize onstage, and take the spotlight before time runs out. Alliances bring additional rewards for meeting specific scoring thresholds and for cooperating with their opponents.

SCORING PERIODS

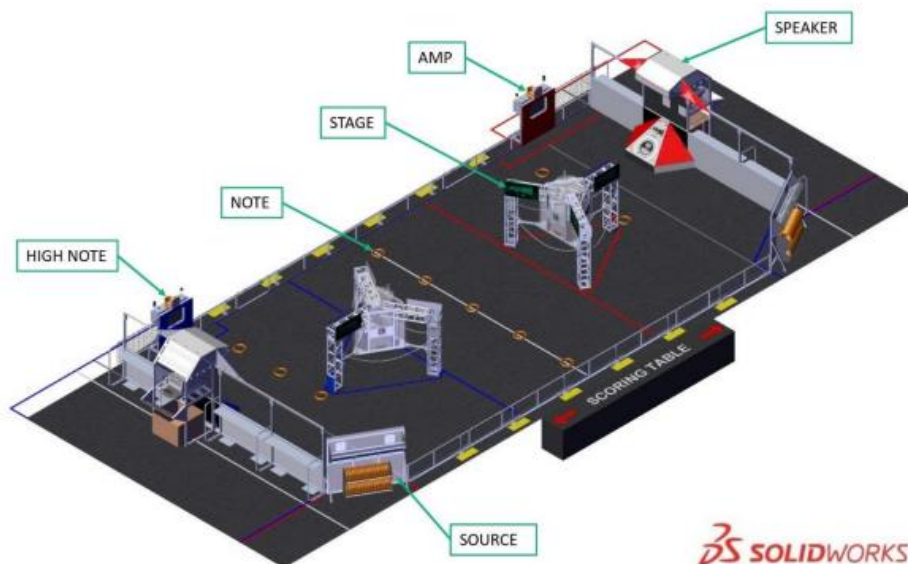
:15 Autonomous Period: Robots follow pre-programmed instructions and run autonomously (without guidance from their human drivers). During Autonomous, Alliances score points by:

- Leaving their starting zone,
- Retrieving and scoring notes (game pieces) in their speaker or amp,

2:15 Driver-Controlled Period: Drivers take control of the robots and Alliances score points by:

- Collect notes (game pieces) from human players at their source and score them in their amp or speaker,
- Each time an Alliance gets 2 notes in their amp, the human player can amplify their speaker for 10 seconds which increases the point value for any notes scored during the 10 second period.
- Coopertition Period – Human players may choose to repurpose a note scored in their amp in cooperation with their opponent. If each Alliance repurposes a note by hitting their Coopertition button in the first 45 seconds of this period, all teams in the match receive a Coopertition point.
- As time runs out, robots race to get onstage and deliver notes to their traps. Chains exist on the stage that robots try to hang on (robots must be off the floor). A human player can also toss a note onto the pipe (microphone) sticking above the stage for additional points.

The alliance with the highest score at the end of the match wins!



District Ranking Explanation

In the District Model of competition, teams are ranked throughout the season based on the points they earn at their first 2 home District events they attend, as well as at their District Championship. Below is a breakdown of how points are awarded to teams from the *FIRST* Robotics Competition (FRC) Administrative Manual.

Point Category	Points
Qualifying Rounds	
Qualification Round Performance	$\text{QualificationPoints}(R, N, \alpha) = \left[\text{InvERF} \left(\frac{N - 2R + 2}{\alpha N} \right) \left(\frac{10}{\text{InvERF} \left(\frac{1}{\alpha} \right)} \right) + 12 \right]$ <p>(For typically-sized district events, this will result in a minimum of 4 points being awarded for qualification round performance. For events of all sizes, a maximum of 22 points will be awarded)</p>
Alliance Selection Results After Alliance Selection is Complete	
Alliance Captains	Equal to 17 minus the Alliance Captain Number [e.g. 14 points for Alliance #3 Captain]
Draft Order Acceptance	Equal to 17 minus the Draft Order Acceptance Number [e.g. 12 points for the Team that is 5th to accept an offer of Alliance]
Playoff Advancement	
Teams on Alliances Advancing	Points awarded based on team participation in individual playoff rounds, and whether or not the alliance advances.
Awards	
Judged Team Awards	10 Points for Impact Award 8 Points each for Engineering Inspiration and Rookie All Star Awards 5 Points each for all other judged Team awards
Team Age	
Team Age	10 Points for Rookie Teams 5 Points for second-year Teams

Points earned at District Championships are multiplied by 3 and then added to points earned at District events, to determine the final season point total for the team. If there is a tie in the season point total between teams, a tie-breaker criteria is applied.

Event Awards

At each district event, volunteers serve as Judges. Judges interview and observe teams in action and determine awards that are distributed during the closing ceremonies of each competition. The following is a list of FIRST® Robotics Competition awards. Every award may not be presented at every FIRST® Robotics Competition event.

Autonomous Award -- Celebrates the team that has demonstrated consistent, reliable, high-performance robot operation during autonomously managed actions.

Creativity Award sponsored by Rockwell Automation -- Celebrates creativity in design, use of component, or strategy of play.

Engineering Inspiration Award -- Celebrates outstanding success in advancing respect and appreciation for engineering within a team's school and community.

Excellence in Engineering Award -- Celebrates an elegant and advantageous machine feature.

Finalist -- Celebrates the Alliance that makes it to the final match of the competition.

FIRST Dean's List Award -- Celebrates outstanding student leaders whose passion for and effectiveness at attaining FIRST ideals is exemplary.

FIRST Impact Award -- The most prestigious award at FIRST, it honors the team that best represents a model for other teams to emulate and best embodies the mission of FIRST

Gracious Professionalism® Award -- Celebrates outstanding demonstration of FIRST Core Values such as continuous Gracious Professionalism® working together both on and off the playing field.

Imagery Award in honor of Jack Kamen -- This award celebrates attractiveness in engineering and outstanding visual aesthetic integration of machine and team appearance.

Industrial Design Award sponsored by General Motors -- Celebrates form and function in an efficiently designed machine that effectively addresses the game challenge.

Innovation in Control Award -- Celebrates an innovative control system or application of control components – electrical, mechanical, or software – to provide unique machine functions.

Judges' Award -- During the course of the competition, the judging panel may decide a team's unique efforts, performance, or dynamics merit recognition.

Quality Award -- Celebrates machine robustness in concept and fabrication.

Rookie All-Star Award -- Celebrates the rookie team exemplifying a young but strong partnership effort, as well as implementing the mission of FIRST to inspire students to learn more about science and technology. NOTE: This award may not be earned at each qualifier event.

Rookie Inspiration Award -- Celebrates a rookie team's outstanding success in advancing respect and appreciation for engineering and engineers, both within their school, as well as in their community.

Safety Animation Award sponsored by UL Solutions – Challenges teams to encourage safe practices by tapping into their creativity and influencing emotions and actions.

Team Spirit Award -- Celebrates extraordinary enthusiasm and spirit through exceptional partnership and teamwork furthering the objectives of FIRST.

Team Sustainability Award sponsored by Dow -- Celebrates and recognizes a team which has developed a sustainable program in order to define, manage, and achieve the team's ongoing objectives.

Winner -- Celebrates the Alliance that wins the competition.

Woodie Flowers Award -- Recognizes an individual mentor who has done an outstanding job of motivation through communication while also challenging the students to be clear and succinct in their communications. Students on each team decide whom to nominate.



Georgia**FIRST**Robotics

Thank you to all our generous sponsors, our faithful and energetic volunteers and the dedicated mentors who give countless hours to make *FIRST* possible for their students. Each FRC event relies on 100+ volunteers to plan and execute. As an all-volunteer organization, we pride ourselves on quality, safety and an overall experience of fun. Thank you to all those who work tirelessly behind the scenes to make *FIRST* happen.

The best of luck to all FRC teams this season from your
Georgia**FIRST** Leadership Council!

Parker Bass
Beth Culp
Charles D'Englere
Bryan Haynes
Kellen Hill
Scott Lee
Roy McConnell
Jeff Rees
Jan Spurlin
Greg Welsch

Adam Churney
Tiffany Dean
Lisa Hatch
Connie Haynes
Jackie Holland
Ross Lindsay
Monish Patil
Flint Shephard
Ray Spurlin
Kathy Wood

Georgia**FIRST**Robotics

Family and friends can watch the event live here: www.gafirst.org

How can you support Georgia**FIRST**?

Form a Team

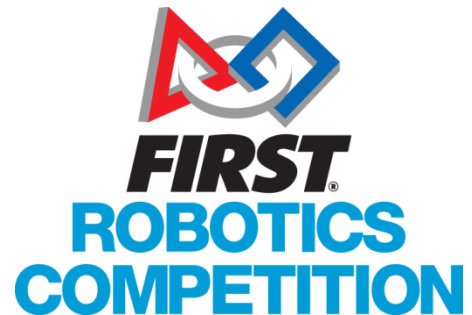
- Learn from engineering pros.
- Apply math and science concepts to design and build robots.
- Gain hands-on experience solving real-world problems.
- Learn about exciting science and technology careers.
- Make new friends.

Contact: Lisa Hatch lhatch@gafirst.org

Be a Volunteer

- Become a Mentor or Coach.
- Organize an event or program.
- Assist at a competition.
- Make a difference in young lives.

Contact: Tiffany Dean tdean@gafirst.org



Become a Team or Event Sponsor

- Provide financial support, equipment, parts, facilities, internships, or other services.
- Offer scholarships.
- Encourage employees to mentor or volunteer.
- Host an event.
- Build community goodwill.
- Inspire employees.
- Help build a technical workforce.

Contact: Connie Haynes (770) 366-5612 chaynes@gafirst.org

Take the next step and contact chaynes@gafirst.org to get involved!

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PEACHTREE DISTRICT

FIRST Robotics Competition

