

FIRST ROBOTICS ONTARIO DISTRICT COMPETITION Newmarket Complex Event March 8-10, 2024



WELCONE

Greetings, FIRST® Robotics Competition teams and welcome to another year filled with creativity, big ideas and bold action!

We're thrilled to see you take the stage for CRESCENDOSM presented by Haas, part of the 2023-2024 cross-program season, *FIRST*® IN SHOWSM presented by Qualcomm. This year, we're shining a spotlight on the role STEM plays in the arts and how it empowers young people, like you, to design and build a world of endless possibilities.

Take a moment to consider just how intertwined STEM and the arts often are. So much of the artistic content we produce and consume has been inspired and brought to life by STEM. It's our STEM skills that help us design a logo, costume, or movie set from a blank canvas, 3-D print a sketch, light the stage for a photoshoot, or rock an arena with a jaw-dropping performance. Our skills and knowledge empower us to be creative, pursue our big ideas, and build what some may only dream of.

To our teams competing this year, congratulations. Your creative spirit, acts of *Gracious Professionalism®*, and collective passion for making a positive difference in the world have touched the hearts of your peers, mentors, local communities, and all of us here at *FIRST*.

And to the mentors, parents, volunteers, partners, sponsors, donors, alumni, and many supporters who invest in *FIRST* participants in countless ways: thank you. You empower students to explore their full potential, forge new paths, and find ways to make an impact, do good, and inspire others to do the same.

As you all step onto the competition stage, remember that *FIRST* is *More Than Robots*®. Your journey with *FIRST* will help you design your life's path, from building perseverance as you overcome obstacles to illuminating career paths you might not have considered – including those in the arts. Just ask our esteemed alumni, some of whom became audio engineers, architectural visualization specialists, VFX artists, cinematographers and more, all while remaining an integral part of our STEM community.

By embracing the connections between STEM and the arts, you're not only shaping the future of technology and science but pioneering the frontiers of human creativity.

The boundaries of what's possible are stretched and reshaped by your collective imagination and resilience, and we can't wait to see the wonders you'll create.

With that said – Lights, Camera, STEAM! Sincerely,

Dean Kamen, FIRST Founder

Chris Moore

Chris Moore, FIRST CEO



Dean Kamen



Chris Moore

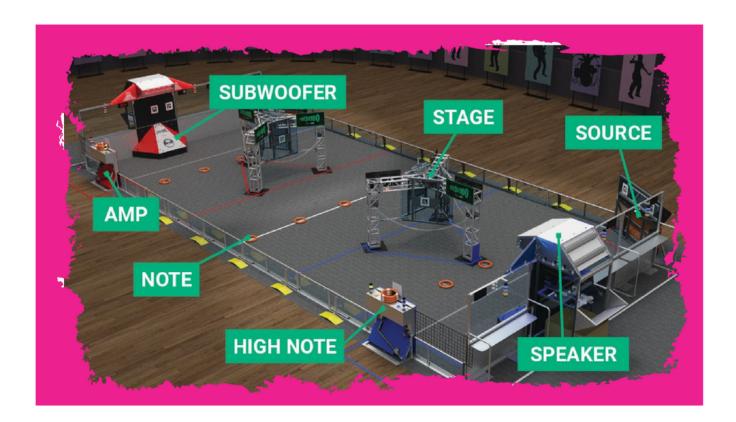


PRESENTED BY -41145

Gameplay

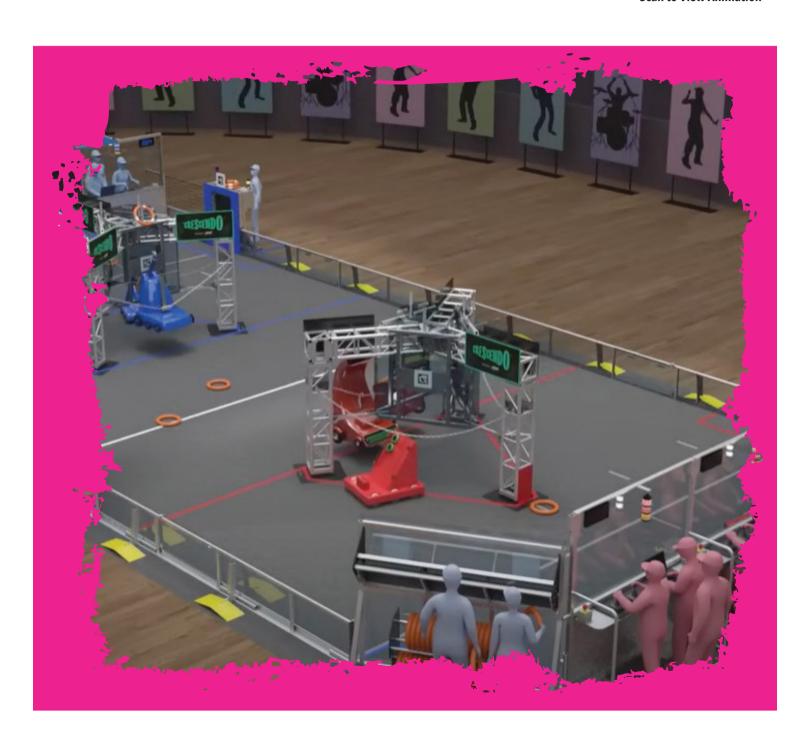
Inspired by the art and experiences that entertain us and move usCRESCENDOSM presented by Haas will shine the spotlight on the impact that engineering and innovation have on art.

- Teams will use their STEM skills and creative power to turn up the volume as they design, build, and program their robots for action-packed game play.
- Each match begins with a 15-second autonomous period, during which robots operate only by preprogrammed instructions to move from their starting positions and score game pieces, called notes, into their two goals: the speaker and the amp. They also use this time to collect additional notes from around the field.
- In the remaining 2 minutes and 15 seconds, drivers control their robots and continue earning points through strategic match play. Once two notes are scored in an alliance's amp, the human player can hit a button to increase the value of notes scored in their speaker for 10 seconds.
- At the end of the match, robots race to climb on chain, score notes in a pocket called a trap, and harmonize by hanging multiple robots on a single chain. Humans throw high notes onto their microphones to boost points associated with robots on the corresponding chains.
- The alliance with the highest score at the end of the match wins!





Scan to View Animation



View the 2024 game animation for the 2024 FIRST Robotics Competition

game, CRESCENDO.



Autonomous Award

Celebrates the team that has demonstrated consistent, reliable, high-performance robot operation during autonomously managed actions. Evaluation is based on the robot's ability to sense its surroundings, position itself or onboard mechanisms appropriately, and execute tasks.

Creativity Award sponsored by Rockwell Automation

Celebrates creativity that enhances strategy of play and was intentionally designed and not discovered.

Digital Animation Award sponsored by AutomationDirect.com

Celebrates the art of the digital animation and its close relationship to STEAM (Science, Technology, Engineering, Art, and Mathematics).

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 the team that demonstrates a professional approach to the design process.

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 purpose and goals of *FIRST*.

Founder's Award

Recognizes the organization or individual that has contributed significantly to the growth 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

In honor of Jack Kamen, Dean's father, for his dedication to art and illustration and his devotion to *FIRST*. This award celebrates attractiveness in engineering and outstanding visual aesthetic integration of machine and team appearance.

Industrial Design Award sponsored by General Motors

Celebrates the team that demonstrates industrial design principles, striking a balance between form, function, and aesthetics.

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.

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

Recognizes the team that submits a short animated film that best promotes the current season's team safety focus.

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 sustainable practices to have a positive environmental impact and achieve long-term continuity.

Volunteer of the Year Award

Presented to an individual, business, or organization that consistently excels in their efforts, with proven results in the areas of impact, leadership, personal commitment, community, and historical contributions.

Winner

Celebrates the Alliance that wins the competition.

Woodie Flowers Finalist Award

Presented to an outstanding Mentor in the robotics competition who best leads, inspires, teaches, and empowers their team using excellent communication skills.



2024 SEASON FACTS





(AS OF 01/04/2024)

- 33rd Season Game: CRESCENDO SM presented by Haas
- 3,468 Teams
 - · 3,141 Veteran Teams
 - · 327 Rookie Teams
- . 86,700+ Youth Team Members
- 27,700+ Mentors/Adult Supporters
- . 28 countries:

Australia (36 teams)Israel (62 teams)
Azerbaijan (1 team)Japan (6 teams)
Belize (1 team)Mexico (86 teams)
Brazil (57 teams)Netherlands (3 teams)
Bulgaria (1 team)Panama (1 team)
Canada (202 teams)Philippines (1 team)
China (22 teams)Poland (1 team)
Chinese Taipei (28 teams)Romania (1 team)
Colombia (1 team)Singapore (1 team)
Croatia (1 team)Sweden (1 team)
Czech Republic (2 teams)Switzerland (1 team)
Dominican Republic (2 teams)Türkiye (138 teams)
France (3 teams)United Kingdom (3 teams)
India (6 teams)USA (2,800 teams)

EVENTS

- 144 Live Kickoff events and streaming on FIRSTtv
- (01/06/2024) 62 Regional Events
- 98 District Events
- * 11 District Championships:
- Chesapeake, Indiana, Israel, Michigan, Mid-Atlantic, New England, North Carolina, Ontario, Pacific Northwest, Peachtree, Texas/New Mexico Districts
- . 1 FIRST® Championship Event: April 17 20, 2024



KIT OF PARTS FACTS

- Items from more than 65 in-kind donors
- Nearly 500 different items distributed via the Kit of Parts system
- More than 72 tons of Kickoff Kit materials shipped all over the world by FedEx (weighing more than 150 grand pianos)

ROBOT FACTS

- · Weight: up to approximately 125 lbs.
- · total Robots are remotely controlled
- · Powered by a 12-volt battery

FIELD FACTS

- Playing area: 27' W x 54' L
- Teams score game pieces, called Notes, in their Amp and Speaker
- As time runs out, robots race to get onstage and deliver Notes to their Traps

ALUMNI

- Participants and alumni of FIRST programs gain access to education and career discovery opportunities, connections to exclusive scholarships and employers,
- and a place in the FIRST community for life.
 Visit firstinspires.org/alumni



Feb 26-27

ISR District Event #1 Hadera, Israel

Feb 28-29

ISR District Event #2 Hadera, Israel

Feb 28-Mar 02

Canadian Pacific Regional Victoria, BC Brazil Regional Brazilia, Brazil

Festival de Robotique Regional Montreal, QC

Greater Pittsburgh Regional Pittsburgh, PA

Lake Superior Regional Duluth, MN

Northern Lights Regional Duluth, MN

Regional Monterrey Monterrey, Mexico

South Florida Regional Fort Lauderdale, FL

Utah Regional West Valley City, UT

Feb 29-Mar 02

FIT District Katy Event Katy, TX

FIT District Waco Event

Waco, TX

FIM District Kettering University

Event #1 Flint, MI

FIM District Milford Event Highland, MI

NE District Granite State Event Salem, NH

PNW District Clackamas Academy Event

Oregon City, OR

Feb 29-Mar 03

Hueneme Port Regional Port Hueneme, CA Silicon Valley Regional San Jose, CA

Mar 01-03

CHS District Ashland VA Event Ashland, VA

CHS District Blacksburg VA Event Blacksburg, VA FMA District Hatboro-Horsham Event Horsham, PA FMA District Mount Olive Event Flanders, NJ

FIN District Mishawaka Event Mishawak. IN

FIM District Battle Creek Event Battle Creek, MI

FIM District Berrien Springs Event

Berrien Springs, MI

FIM District Jackson at Columbia Event

Brooklyn, MI

NE District Hartford Event Hartford, CT

FNC District Orange County Event Chapel Hill, NC

PNW District Glacier Peak Event Snohomish, WA

Mar 03-06

Smoky Mountains Regional Knoxville, TN

Mar 05-07

Istanbul Regional Sarıyer, Türkiye

Mar 06-09

Arkansas Regional Searcy, AR Central Missouri Regional Sedalia, MO

Great Northern Regional Grand Forks, ND

Green Country Regional Tulsa, OK

Hudson Valley Regional Suffern, NY

Mar 07-09

FIT District Belton Event Belton, TX

FIM District Belleville Event Belleville, MI

FIM District Escanaba Event

Escanaba, MI

FIM District Kettering University

Event #2 Flint, MI

FIM District St. Joseph Event St. Joseph, MI

PNW District Oregon State Fairgrounds Event

Salem, OR

PCH District Anderson Event presented by MAGNA Anderson, SC

PCH District Dalton Event Dalton, GA

Mar 07-10

For the latest information on these events, visit frc-events.firstinspires.org/

San Francisco Regional San Francisco, CA Ventura County Regional Port Hueneme, CA

Mar 08-10

CHS District Portsmouth VA Event Portsmouth, VA

FIT District Plano Event Plano. TX

FIM District Woodhaven Event Brownstown Charter Twp, MI

FMA District Allentown Event Allentown, NJ

FMA District Seneca Event

Tabernacle, NJ

FIM District Lake City Event

Lake City, MI

NE District BSU Event

Bridgewater, MA

NE District Waterbury Event

Waterbury, CT

FNC District UNC Pembroke Event

Pembroke, NC

ONT District Centennial College

Event

Scarborough, ON

ONT District Newmarket Complex Event

Newmarket, ON

PNW District Auburn Event

Auburn, WA

Bosphorus Regional Sarıyer, Türkiye

Mar 11-12

ISR District Event #3 Hadera, Israel

Mar 13-14

ISR District Event #4 Hadera, Israel

Mar 13-16

Arizona Valley Regional Scottsdale, AZ Central Illinois Regional Peoria, IL

Finger Lakes Regional Rochester, NY

Heartland Regional Shawnee, KS

Magnolia Regional Laurel, MS

Regional Hermosillo Hermosillo, Mexico Sacramento Regional Elk Grove, CA Tallahassee Regional Tallahassee, FL

Mar 14-16

San Antonio, TX

FIT District Fort Worth Event Fort Worth, TX FIT District San Antonio Event

FIM District LSSU Event Sault Ste. Marie, MI

FIM District Muskegon Event Muskegon, MI

FIM District Traverse City Event Traverse City, MI

FIM District Wayne State Event Detroit, MI

NE District URI Event Kingston, RI

PNW District SunDome Event Yakima, WA

Mar 14-17

Los Angeles Regional El Segundo, CA Wisconsin Regional Milwaukee, WI

Mar 15-17

CHS District Glen Allen VA Event Glen Allen, VA

CHS District Severn MD Event

Severn, MD

FMA District Montgomery Event

FMA District Springside Chestnut Hill Event

Philadelphia, PA

FIN District Columbus Event Columbus. IN

FIM District Ann Arbor Event Ann Arbor, MI

NE District North Shore Event

Reading, MA

NE District Pine Tree Event

Lewiston, ME

FNC District UNC Asheville Event

Asheville, NC

ONT District Durham College

Event

Oshawa, ON ONT District Georgian Event

Barrie, ON

PNW District Bonney Lake Event Bonney Lake, WA

PCH District Gwinnett Event

Lawrenceville, GA

For the latest information on these events, visit frc-events.firstinspires.org/

Southern Cross Regional South Windsor, Australia

Mar 18-20

ONT District Humber College Event Toronto, ON

Mar 19-21

FIRST Israel District Championship

Jerusalem, Israel Haliç Regional Sarıver, Türkive

Mar 20-23

Arizona East Regional Tempe, AZ

Buckeye Regional Cleveland, OH Colorado Regional

Denver, CO

FIRST Long Island Regional

Hempstead, NY Idaho Regional Nampa, ID

Iowa Regional Cedar Falls, IA

New York Tech Valley Regional

Albany, NY Orlando Regional Orlando, FL

Regional Laguna presented by Peñoles

Torreon, Mexico St. Louis Regional St. Louis, MO

Mar 21-23

FIT District Dallas Event Dallas, TX

FIM District Lansing Event

Mason, MI

FIM District Midland Event

Midland, MI

FIM District West Michigan Event

Allendale, MI

ONT District University of

Waterloo Event Waterloo, ON

PNW District Wilsonville Event

Wilsonville, OR

PCH District Carrollton Event Carrollton, GA

PCH District Charleston Event N. Charleston, SC

Mar 21-24

Central Valley Regional Fresno, CA

San Diego Regional presented by Qualcomm

La Jolla, CA

Mar 22-24

CHS District Falls Church VA Event presented by Department of Energy Falls Church, VA

CHS District Owings Mills MD Event

Owings Mills, MD

FIT District Houston Event Houston, TX

FMA District Bensalem Event

Bensalem, PA FMA District Warren Hills Event

Washington, NJ FIN District Plainfield Event

presented by Carrier

Plainfield, IN

FIM District Livonia Event Livonia, MI

FIM District Troy Event #1

Trov. MI

NE District Greater Boston Event

Revere, MA

NE District Western NE Event

Springfield, MA

FNC District Mecklenburg County

Event

Charlotte, NC

FNC District Wake County Event Wake Forest, NC

ONT District North Bay Event North Bay, ON

PNW District Sammamish Event Bellevue, WA

Marmara Regional Sarıyer, Türkiye

Mar 27-30

Las Vegas Regional Las Vegas, NV Midwest Regional Chicago, IL

Monterey Bay Regional Seaside, CA

Orange County Regional Costa Mesa, CA

Mar 28-30

FIT District Amarillo Event Amarillo, TX

FIT District Space City @ Friendswood Event Friendswood, TX

FIM District Kentwood Event Kentwood, MI

FIM District Macomb Community College Event Sterling Heights, MI

FIM District Central Michigan University Event

FIM District Renaissance Event Detroit, MI

FIM District Troy Event #2

Troy, MI

Mt. Pleasant, MI

FIN District Washington Event presented by Toyota Washington, IN

NE District UNH Event

Durham, NH

ONT District McMaster University

Hamilton, ON

ONT District Windsor Essex Great

Lakes Event Windsor, ON

PCH District Albany Event

Albany, GA

Mar 29-31

NE District WPI Event Worcester, MA

Apr 03-06

FIRST In Texas District Championship Houston, TX

New England FIRST District Championship

West Springfield, MA

FIRST Ontario Provincial Championship Mississauga, ON

Pacific Northwest FIRST District Championship Portland, OR

Aerospace Valley Regional Lancaster, CA

Bayou Regional Kenner, LA

Greater Kansas City Regional Lee's Summit, MO

Hawaii Regional Honolulu, HI

Miami Valley Regional Cincinnati, OH Minnesota 10,000 Lakes Regional

Minneapolis, MN Oklahoma Regional Oklahoma City, OK

Rocket City Regional Huntsville, AL

Seven Rivers Regional La Crosse, WI

Apr 04-06

FIRST Mid-Atlantic District Championship Bethlehem, PA

FIRST in Michigan State Championship University Center, MI Peachtree District Championship Macon, GA

Apr 04-07

FIRST Chesapeake District Championship

Petersburg, VA East Bay Regional Berkeley, CA

Minnesota Granite City Regional St. Cloud, MN

New York City Regional New York, NY

Apr 05-07

FIRST Indiana State Championship Lafayette, IN

FIRST North Carolina District State Championship

Greenville, NC April 17-20

2024 FIRST Championship presented by BAE Systems Houston, TX

Abbreviation Key

CHS - FIRST Chesapeake

FIM - FIRST in Michigan

FMA - FIRST Mid-Atlantic

FNC - FIRST North Carolina

FTA - FIRST in Texas

FIN - FIRST in Indiana

NE - New England FIRST

ONT - FIRST Ontario

PCH - Peachtree

PNW - Pacific Northwest

ISR - FIRST Israel

Community Robotics

9				
Team Number	Team School/Organization	Nickname	City	Rookie Year
Canada-	 Newmarket District Event 			
610	Crescent School/Doc-Chef Culinary Enterprise/Heliolytics/Telus/Taplytics/Extrude-A- Trim&Crescent School	Crescent Coyotes	Toronto	2001
771	Collins Aerospace Systems/Hatch/Shaw Almex&St. Mildred's Lightbourn School	SWAT	Oakville	2002
865	Toronto District School Board/Motorola Solutions Foundation/The Optimist Club of Etobicoke/AFA Systems Ltd./Google/Bissell/Landcare/WARP7 Parents & Supporters&Western Technical-Commercial School	WARP7	Toronto	2002
1114	General Motors/Ontario Power Generation/FIRST Canada/Vykan/Johnson & Johnson/Embark&Governor Simcoe Secondary School	Simbotics	St Catharine	s 2003
1305	Canadore College/Nipissing University/PEO North Bay Chapter/Near North District School Board/General Motors/Enbridge Gas&Near North Student Robotics Initiative	Ice Cubed	North Bay	2004
2056	ArcelorMittal Dofasco/GM/HWDSB&Orchard Park Secondary School	OP Robotics	Stoney Cree	k 2007
2386	Arcelor Mittal Dofasco/Halton District School Board/Pathways/BMP Metals/Bentley Systems/FeedRite Automation/Hatch/Studica/iCubed/Powerhouse Controls/Taylor Steel/B & D Steel/Penta Properties/Sew 'n Stuff/Klearview&Burlington Central High School	Trojans	Burlington	2008
2706	General Dynamics Mission Systems Canada/Apple/MVS Remote Video Systems Inc./Collins Aerospace/Enbridge Gas/Northern Lights Educational Services/SolidWorks/Ottawa West Community Robotics & Neighborhood Group	Merge Robotics	Ottawa	2009
4015	St. Joseph Secondary School	Jag	Mississauga	2012
4039	John Deere/General Motors/Novelis/Magna International/Hickory Dickory Decks/TCA Technologies/The Giovinazzo Family/Shift It Solutions/Team-1 Academy/Comfort First Heating and Cooling/Canadian Tire Dundas/Internet Marketing Geeks/Tegs Tools and Machinery/Turkstra Lumber/Hamilton-Wentworth Catholic District School Board&St. Mary Catholic Secondary School	MakeShift Robotics	Hamilton	2012
4152	Marwood International/Kimberly-Clark/Seals For Life/Rotary Club of Huntsville&Huntsville High School	Hoya Robotics	Huntsville	2012
4343	Magna/York Catholic District School Board/TD Synnex & Dell Technologies/Clover Tool Manufacturing Limited/STEM Minds/Town of Aurora/Home Hardware/Rotary Club of Aurora/TACC Developments/Staples - Solution Shop /Antoniette Catenacci (Haute Couture)/BALLUFF/Irwin Industrial/Optimist Club of Aurora/Princess Auto&St Maximilian Kolbe Catholic High School	MaxTech	Aurora	2012
4476	Kingston Community Health Centres/BGC South East/Novelis/Pure Ingenuity/TC Energy&W.A.F.F.L.E.S. Community Robotics	W.A.F.F.L.E.S.	Kingston	2013

Team Number Team School/Organization Nickname City Rookie Year Canada— Newmarket District Event - Cont

4940 FCA Foundation/Centerline/Paragon Professional Knight Vision Windson 2014

4940	FCA Foundation/Centerline/Paragon Professional Engineering&Holy Names Catholic High School	Knight Vision	Windsor	2014
4951	The Country Day School	CDS Cyclones	King	2014
4976	Flodraulic/Hey Ray Real Estate/Georgetown Rotary Club/Canadian Tire&Georgetown District High School	Revolt Robotics	Georgetown	2014
5024	TR Electronic/Enbridge Gas Inc/London Children's Museum/Cornerstone Architecture Incorporated/Thameford Lion's Club/Swish Maintenance limited/Thames Valley District School Board&HB Beal Secondary School	Raider Robotics	London	2014
6514	RBC Wealth Management PH&N Investment Counsel&SUTTON DISTRICT HIGH SCHOOL	Sutton Robotics League	Sutton West	2017
6854	Thames Valley DSB/North Aircraft/North London Toyota/BOS Innovations/Starlim/Ontario Public Service Employees Union (OPSEU)/London Enconomic Development Corporation/Presitige Car Wash/Real Canadian Superstore/Village Green Family Dentistry&A.B. LUCAS SECONDARY SCHOOL	Viking Robotics	London	2018
6975	Neil McNeil High School	Neil McNeil Maroonotics	Scarborough	2018
6978	Niagara Robotics/Jordan Engineering/Telestream/Vykan Inc./Make It Metal/Woodbridge Foundation/Enbridge Gas/General Motors&Family/Community	QuickStrike Niagara	Saint Catharines	2018
6987	Make Stuff Move/Omni Evolutions/Geo. T. White/BTW IT Services & Electronic Parts/Trillium Lakelands District School Board&Fenelon Falls Secondary School	Falcon Automation	Fenelon Falls	2018
7200	FIRST Canada&Banting Memorial High School	Banting Memorial High School	Alliston	2018
7476	Marvell/NRC Teleresources/Dentons/Rotary Club of Kanata/Palladium Insurance/Posit/Metal Pros/Sticker Giant&Earl of March Secondary School	Aureus	Kanata	2019
7480	2019 Argosy Foundation FRC Rookie Grant/Novelis Inc./FIRST Canada/Retired Teachers of Ontario/Electro-meters/iStorm/QFRC/Server Cloud&Family/Community	Machine Mavericks	Kingston	2019
7757	Hobart Owen Sound/Hydrogen Optimized/Bruce Power/Common Grounds Café/Bruce-Grey Catholic District School Board&St. Mary's High School	Atomic Dishwashers	Owen Sound	2019
8089	Vigor Clean Tech/Keeping It Simple/Engenuity Corporation/Northern Digital Inc. /Rockway Mennonite Collegiate&Rockway Mennonite Collegiate	Rockway Robotics	Kitchener	2020
8349	FIRST Canada Rookie Grant/New Team Growth Grant/NewMakeIt/Tech-Pre/Magna International/SicoSoft Consulting&Newbotics Community Robotics	Newbotics	Newmarket	2020

11				
Team Number	Team School/Organization	Nickname	City	Rookie Year
	And the second second			

Team Numbe	er Team School/Organization	Nickname	City	Rookie Year
Canada	a— Newmarket District Event - Co	nt		
8729	Leonardo DRS/Bell Mobility/intact Insurance/Ross Video/Kirality Drones/Jaimac Risk Management/Solidworks/Argosy Foundation/National Research Council Canada & Family/Community & Spark Youth Robotics Club	Sparkling H2O	Kanata	2022
8764	Thornlea Secondary School/and Parents&Thornlea Secondary School	Thunder Robotics	Thornhill	2022
9062	Columbia International College/London North Rotary Club/Thomas Steele/Argosy Foundation/FRC 5406: Celt-X/Carbon Noir Customs/NorthPoint Powder Coating/Family & Friends&Columbia International College	Critical Circuits	Hamilton	2023
9098	FIRST Canada/HAAS/HATCH/Romag Contracting Ltd/Spartan Impressions/Brantford KIA/Optimist Club of Oakville/Schultz Manufacturing/Halton Catholic District School Board&St. Ignatius of Loyola Catholic Secondary School	FireHawks	Oakville	2023
9127	Marvell/NRC Teleresources/Dentons/Rotary Club of Kanata/Palladium Insurance/Posit/Metal Pros/Sticker Giant&Earl of March Secondary School	Lioneers	kanata	2023
9580	Georgian College of Applied Arts and Technologies	#ChangeTheNow	Barrie	2024

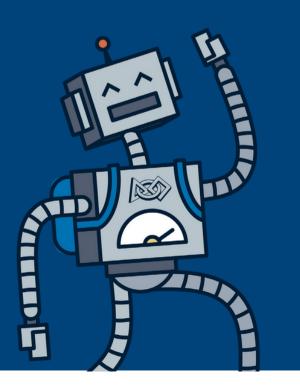
The 2024 FIRST® Championship starts April 17

Pack your bolts, bots, and bags!

FIRST® has put together exclusive FIRST Championship housing discounts so you and your team can have the time of your lives when you get there. When you book with FIRST, you will:

- · Stay close to the venue and other teams
- Receive guaranteed low rates at FIRST-reviewed hotels
- Enjoy convenient, FIRST-only contracted amenities at most hotels including complimentary Wi-Fi, breakfast, and parking
- · Gain flexibility to make booking adjustments and pay later
 - Get reservation protection and assistance before, during, and after your stay if any unexpected challenges occur

Book your hotel reservations today! www.firstchampionship.org



2024 Ontario Newmarket District Event Schedule

Day 0 - March 8

2:30pm 4:30pm Team Load In (5 Team Reps)

4:30pm Pits Open, Inspections

5:30pm 8:00pm Filler Line Practice Matches

9:00pm Pits Close

Day 1 - March 9

8:00am Pits Open, Inspections

8:30am Drivers meeting

9:15am 10:45am Practice Matches

11:00am Opening Ceremonies

11:30am 1:30pm Qualification Matches

1:30pm 2:30pm Lunch

2:30pm 7:00pm* Qualification Matches

8:00pm Pits Close

Day 2 - March 10

8:00am Pits Open

9:00am 9:30am Opening Ceremonies

9:30am 12:45pm* Qualification Matches

1:00pm 1:30pm Alliance Selections

1:30pm 2:30pm Lunch

2:30pm 5:30pm Playoff Matches

5:30pm** 7:00pm Awards / Closing Ceremonies

7:30pm Pits Close

*Schedule subject to change. All times are estimated based on flow of rounds.

See Pit Administration table for updated times.



AL MAGNA

Dream big. With us.

And join our team.

You bring the next generation of innovative thinking. You want to work for an entire industry. You are ready to change the world. We have student opportunities from co-op placements, internships and apprentice programs. Imagine limitless opportunities with us.

We'll create the future of mobility, together. Forward. For all.

magnacareers.com



Join Our Talent Community



Career Opportunities

Judges

Led by Our Judge Advisor:

Milind Ghanekar

VP Account & VAR Management Viasat

Aleksey Tsaplin

Founding Engineer Frate Inc.

Andrew Rehkopf

Senior Program Manager Alphawave Semi

Annabelle Lee

IT Security Specialist IBM Canada Ltd.

Anshul Johari

SMTS Design Engineer Advanced Micro Devices, Inc.

Ben Larouche

Mission Manager Space Flight Laboratory University of Toronto Institute for Aerospace Studies

Brian Dorrepaal

Retired Physics Teacher

Dan Leiding

Technical Specialist; Analytical Instrumentation Lakeside Process Controls

Somil Nishar

Lead Automation Engineer Quality Design Services, Inc

Derek Sharpe

Business Lead Rockwell Automation, Inc.

Derrol Salmon

Director, Board of Directors NewMakelt

Duncan Osler

Senior Accountant Ernst & Young

Eric Borromeo

Senior Vice President, Credit, Retention Wells Fargo Bank, Canadian Branch

GeoffreyTiedemann

lan Donaldson

Mechanical Engineer Horstman Canada

Kevin Goodenough

Software System Designer Advanced Micro Devices, Inc.

Kris Karas

Pharmacist Skycare

Kristen Leroux

VP Canada Market DXC Technology

Matthew Klincans

Spectrum Engineer OneWeb

Maud Gorbet

Professor and Biomedical Engineering Director Department of Systems Design Engineering, University of Waterloo

Mohammad Elbalkiki

Senior Compiler Verification Engineer NVIDIA

Patsy Wong

Digital Solutions
Program Consultant
Canadian Institute for
Health Information

Renee Reil

Technical Writer Brock Solutions

Rob Gorbet Associate

Professor, Department of Knowledge Integration University of Waterloo

Sandra Weir **Technical Sales**

Specialist IBM

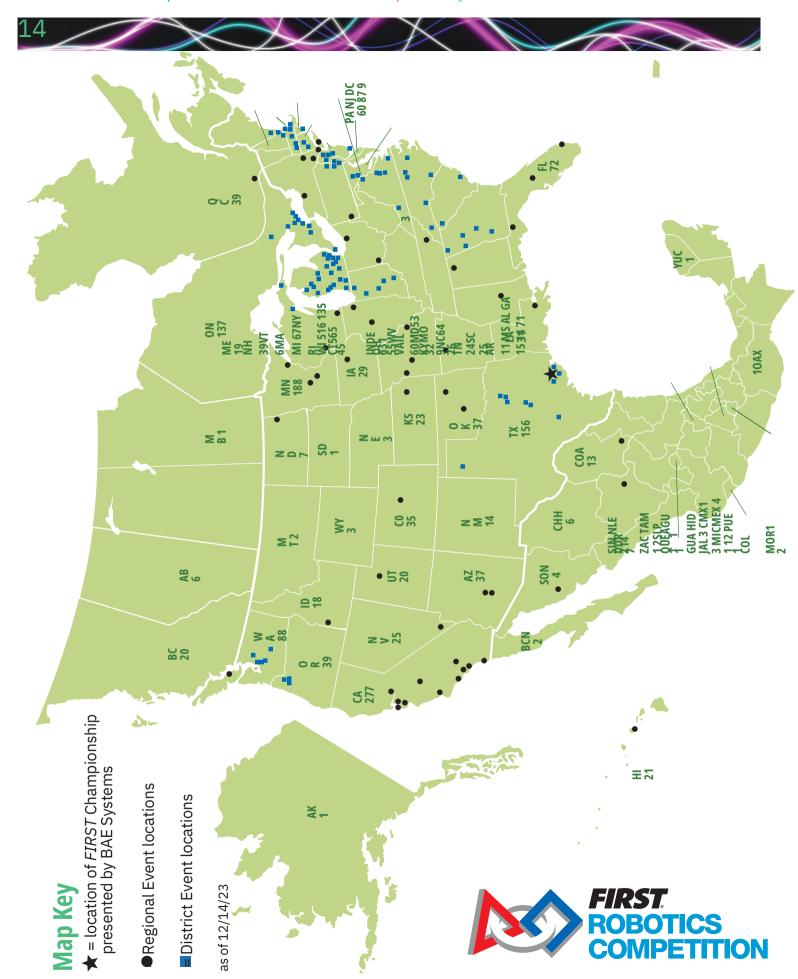
Somil Nishar

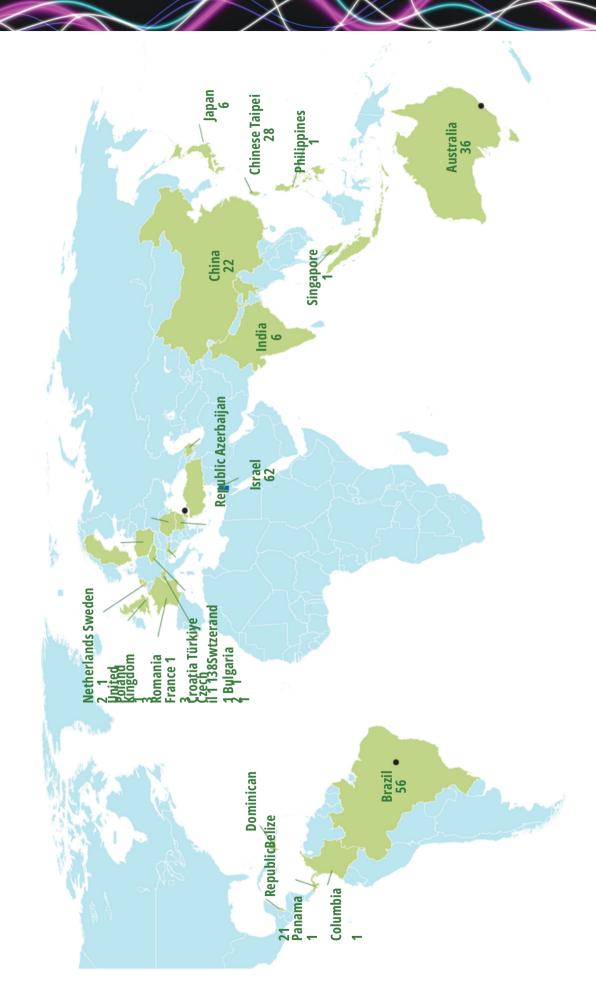
Lead Automation Engineer Quality Design Services, Inc

Yerong Chen

Senior Member of Technical Staff Advanced Micro Devices, Inc.

Zoia Shamrai





Get Involved!

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.

Be a Volunteer...

- Become a mentor.
- □ Organize an event or program.
- \square Assist at a competition.
- ☐ Make a difference in young lives.

Contact: jaeleen.koscielski@firstroboticscanada.org

Become a Team or Regional 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: arti.javeri@firstroboticscanada.org



Donate!



- Help ensure thousands of students have access to unique learning experiences.
- Support the next generation of technological innovators and problem solvers.
- Scan this code with your smartphone to launch our securenline donation page on your browser.

Thank you for your generosity!

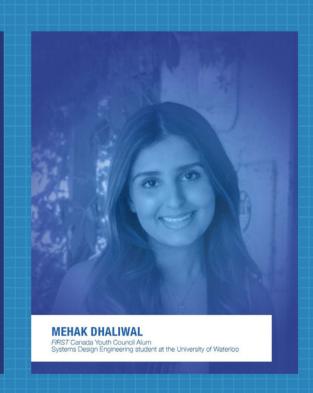




Participants and alumni of *FIRST* programs gain access to education and career discovery opportunities, connections to exclusive scholarships and employers, and a place in the *FIRST* community for life.

firstroboticscanada.org/get-involved/alumni/

I remember reading "FIRST is more than robots" on the website as I registered for my robotics team. Being new to FIRST, I did not understand the meaning behind it. Now 7 years later, as a FIRST Alumni, this phrase defines my journey. For myself, FIRST is about community. I have made long-lasting friendships and acquired many skills that make me the leader I am today. As an alum, I'm able to witness just how far the FIRST community extends, and network you gain access to. There is this automatic bond when you know someone who has also gone through the FIRST program. My time as a FIRST participant helped reinforce my values and inspired me to purse a career in Engineering at the University of Waterloo.



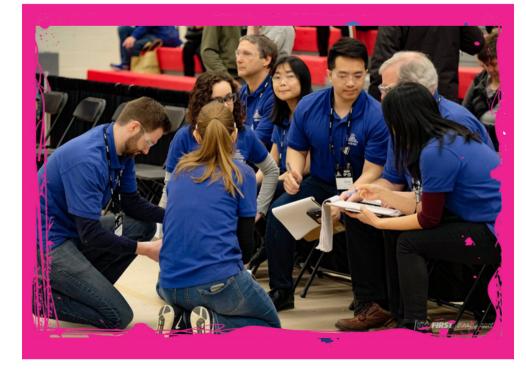
FIRST Volunteers Inspiring the Future Since 1992

The Newmarket Complex District Event relies on dedicated volunteers and appreciates the contribution of time from everyone who participates. From the expertise of veteran volunteers who return year after year, to the enthusiasm of first-timers, volunteers are the critical component that make our events successful. A special thank you to the members of the Newmarket Complex District Event planning committee, who work tirelessly to plan this event each year.







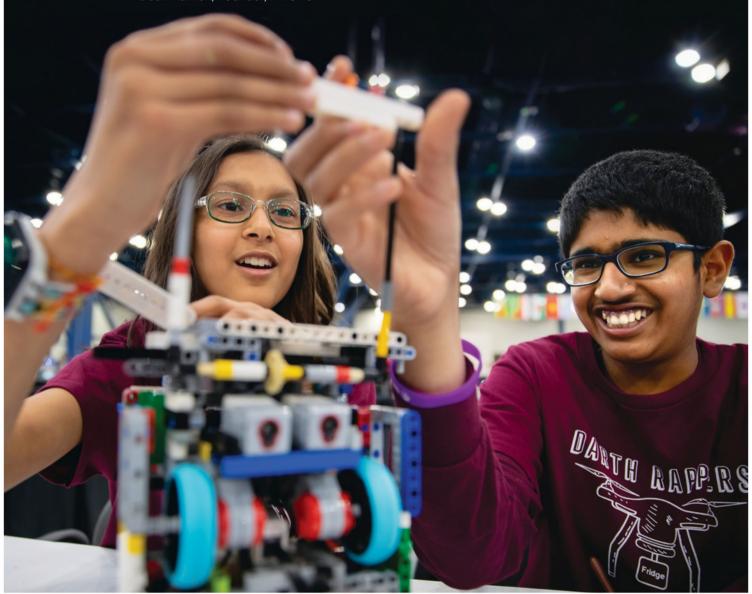






We are not using kids to build robots. We are using robots to build kids.

- Dean Kamen, Founder, FIRST®





Help FIRST® Canada provide unique, handson STEM learning experiences to millions of students!



FIRST® — A Suite of Hands-On, STEM Learning Programs

FIRST® is the world's leading youth-serving nonprofit advancing STEM education. For over 30 years, students from all walks of life have developed self-confidence in STEM and valuable, real-world skills through FIRST that open pathways to a better future.

Through a suite of team-based robotics challenges and backed by a global network of mentors, coaches, volunteers, alumni, and sponsors, FIRST helps young people discover a passion for STEM and develop the skills they'll need to succeed in today's competitive workforce.

Children can start their journey with FIRST® LEGO® League and progress through FIRST® Tech Challenge and FIRST® Robotics Competition, or join any of our three programs based on age or grade level

GRADES PREK-8 · AGES 4-16*



Young Innovators Use Skills and Imagination to Solve

Problems as a Team

FIRST LEGO League introduces STEM to children through fun, exciting hands-on learning. Participants gain real-world problem-solving experiences through a guided, global robotics program, helping today's students and teachers build a better future together. FIRST LEGO League's three age-appropriate divisions inspire youth to experiment and grow their critical thinking, coding, and design skills through hands-on STEM learning and robotics.

*Ages vary by country

GRADES 7-12 · AGES 12-18



It's Way More Than Building Robots

FIRST Tech Challenge students learn to think like engineers. Teams design, build, and program robots to compete in an alliance format against other teams. Robots are built from a reusable platform, powered by Android technology, and can be coded using a variety of levels of Java-based programming Participants and alumni have access to career discovery opportunities, networking, and the FIRST Scholarship Program.

GRADES 9-12 · AGES 14-18



An Exciting Sport Built Around the World of STEM

FIRST Robotics Competition teams design, program, and build a robot starting with a standard kit of parts and common set of rules to play in a themed head-to-head challenge. Teams also build a brand, develop community partnerships for support, and work to promote STEM in their local community.

Participants and alumni have access to career discovery opportunities, networking, and the *FIRST* Scholarship Program.

At the heart of *FIRST* are its Core Values, which emphasize the contributions of others, friendly sportsmanship, teamwork, learning, and community involvement. These include Gracious Professionalism® (respect for others, being a good sport, and sharing what you learn) and Coopertition® (competing hard but also helping the other teams).

We'd like to thank our Sponsors and Partners for their commitment to the vision of FIRST® and who continue to help FIRST® grow!

Platinum Plus



















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Bronze

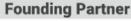








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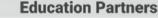




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Supporters

























https://www.firstroboticscanada.org/

FOR INSPIRATION & RECOGNITION OF SCIENCE & TECHNOLOGY



