



Ways to Inspire Conference

September 28th, 2024

Orchard Park Secondary School
200 Dewitt Rd, Stoney Creek
L8E 4M5 [map](#)

[REGISTER HERE!](#)

Doors Open at 8:30 am

Sessions begin at 9:00 am and end at 3:00 pm

Lunch will be held 12:20 pm - 1:30 pm

Community BBQ, Robot Demos, and ***EXCLUSIVE*** 2056 Merch for Sale

BBQ Bundle (burger/hotdog, drink, & chips) - \$10 (Vegetarian options available)
Payment Accepted: Debit, Credit, or Cash

Learn about:

- FRC
- FTC
- Strategy
- Design
- Mechanical
- Electrical
- Programming
- Team Management
- Equity & Diversity
- Elementary Robotics



Presentations for:

- Student/Team Member
- Alumni
- Mentor
- Parent
- Rookie Teams
- Veteran Teams

8:30 AM	8:30AM - 9:00AM: Registration and Welcome					
9:00 AM	The Celt-X Superpit, design, experience and lessons learned Brendan Simons 5406	Strategies for Fostering Equity, Diversity, and Inclusivity in a FIRST Team Edmund Kim 5719	Strategy 101 Nathan & Nikhita 3683	The Importance of RF Communication in Robotics Michael J Martin	2056 Ways to Code Eric & Tyler 2056	SESSION 1: 60 MIN
10:00 AM	10:00AM - 10:10AM: 10 min Break					
10:10 AM	How to Make the Most of your FRC Experience? Emily Forster 2056	FTC SIM: Web Based Coding Simulator Lisa Ramraj	Evaluating team resources Al Douglas 4903	How to Scout an FRC Event Hassan & Caleb 2056	Maximizing your On-Field Performance Tyler Holtzman 2056	SESSION 2: 60 MIN
11:10 AM	11:10AM - 11:20AM: 10 min Break					
11:20 AM	Volunteering in FIRST FIRST Canada Youth Council	Teaching Gifted Students Math through Programming Enzo Ciardelli	Mastering Drive Coaching in FRC: Training, Strategy, and Avoiding Pitfalls Rishi & Shahroze 1241	From Pit to Public: How to Manage External and Internal Relations Alice & Craig 3161	2024 Robot demo and Q&A Balraj, Irush, Stephan, Chayanth 2056	SESSION 3: 60 MIN
12:20 PM	12:20PM - 1:30PM: 70 min BBQ Lunch, Open House, and *EXCLUSIVE* 2056 Merch for Sale					
1:30 PM	Parent panel, what to expect as a robotics parents. Jeff Beattie	FIRST Robotics Competition Simulator William Neal	FRC Team Best Practices Thomas Steele 5406,9062	Punching Above Your Weight: Using Strategy to Maximize on Field Performance Brennan & Taegen 4476	FRC Design in the Modern Era Tyler Holtzman 2056	SESSION 4: 90 MIN
3:00 PM						

2056 Related
Mechanical Design
Programming
Strategy/Scouting
Team Management
Awards
Elementary Robotics
Other

Select three 60 minute sessions for the morning and one 90 minute session for the afternoon.

[Registration Link](#)

Maximizing your On-Field Performance	A look inside the competition season of team 2056. Our processes, tips, and tricks.
Tyler Holtzman 2056	
2024 Robot demo and Q&A	A showcase and demonstration of OP's 2024 robot Low-Key and Q&A for the past 3 robots
Balraj, Irush, Stephan, Chayanth 2056	
FRC Design in the Modern Era	A look at how design in FRC has changed in the last 5 years and how teams can best adapt to the modern era
Tyler Holtzman 2056	
The Celt-X Superpit, design, experience and lessons learned	After years of planning and fundraising, Celt-X built "Superpit" road cases in the summer of 2023. We will present the design and lessons learned after a year of using these cases at home and at competition.
Brendan Simons 5406	
2056 Ways to Code	Join FIRST Robotics Team 2056 as we share some best programming practices, including effective planning with state machines, organizing subsystems with multi-file programming, and optimizing robot controls for an improved driver experience. We'll also cover autonomous strategies, focusing on balancing consistency and accuracy, and share insights into using Limelight for vision processing. Perfect for teams looking to enhance their programming skills and robot performance.
Eric Morse & Tyler Holtzman 2056	
FTC SIM: Web Based Coding Simulator	FTC SIM is a virtual coding tool for FTC Blocks and OnBot Java programming. It allows users to code and run a virtual FIRST Tech Challenge robot autonomously for free! Users can learn everything from basic movement to how to use sensors by completing a series of puzzles using Blocks or Java. It has embedded tutorials, monthly challenges, a multi player option, world builder capabilities, a teacher's portal and the last three FTC game fields! You can use it to teach programing in a classroom, train rookie FTC team members and introduce coding to your community via workshops/camps.
Lisa Ramraj	
FIRST Robotics Competition Simulator	We present a means of simulating FRC robots in a 3D environment with a realistic implementation of tank, swerve, robot physics, time trials, import from CAD and much more! Allow the drivers and coders to work all season alongside the CAD team and build team!
William Neal	
How to Scout an FRC Event	In this session with 2056 Strategy and Scouting mentors, we will explore how to make the most of the data that you collect at an FRC event.
Hassan & Caleb 2056	
Mastering Drive Coaching in FRC: Training, Strategy, and Avoiding Pitfalls	In this session, we will explore the essentials of effective drive coaching in FRC. Learn how to train and develop a cohesive drive team, build a robust strategy-to-match-play pipeline, and avoid common mistakes that can derail your season. Whether you're a seasoned coach or new to the role, this presentation will provide valuable insights and actionable tips to help your team succeed on the field. --- This concise description highlights the key topics and sets the tone for an informative and practical session.
Rishi & Shahroze 1241	
Strategy 101	Strategy and what is it, the in and outs of the behind the scenes of every good match. We will look at how to make your robot excel and turn your matches of three like your playing as one
Nathan & Nikhita 3683	
Punching Above Your Weight: Using Strategy to Maximize on Field Performance	In this talk, we're going to cover how to incorporate strategy from kickoff day to Einstein. This includes topics such as designing strategically from day one, integrating your scouting and strategy sub teams at an event, and getting into the details of efficient match planning and focusing how to actually win a match, even when it's stacked against you.
Brennan & Taegen 4476	
FRC Team Best Practices	We'll be going over a variety of topics in FRC, including team organization, safety, and modular design. This is for both

Thomas Steele 5406,9062	technical and non-technical audiences interested in leveling up their FRC team. We will be discussing and demonstrating the popular wiring and bumper securement methods with a robot built by rookie students on Team 9062.
Evaluating team resources	How to better evaluate your team's resources to be able to build the best robot to achieve your team's goals this year. Learn from 4903's successes and failures (mostly from our failures!) on how to gauge what resources your team has available going into build season. Participate in an interactive, theoretical robot build game where trade-off and difficult decisions based on your resources need to be made. Ideal for rookie and young teams.
Al Douglas 4903	
Strategies for Fostering Equity, Diversity, and Inclusivity in a FIRST Team	This workshop provides researched information and engaging, practical activities, usable immediately. The workshop aims to foster discussions about equity, diversity, and inclusivity in FIRST teams.
Edmund Kim 5719	
How to Make the Most of your FRC Experience?	FRC Teams are about building more than robots - they're about building people, but what does that REALLY mean? In this presentation, Team 2056 Alumni, Emily Forster, will discuss her 4 years on the team to inspire others to make the most of their own experience.
Emily Forster 2056	
From Pit to Public: How to Manage External and Internal Relations	This presentation will cover topics related to social media engagement, networking and community interactions, documentation, internal communications, and outreach.
Alice & Craig 3161	
Teaching Gifted Students Math through Programming	This presentation outlines the tools used with gifted students to teach programming. Participants will learn about student needs and engage with hands on tools.
Enzo Ciardelli	
Parent panel, what to expect as a robotics parents.	Joining a robotics team can be a scary experience...for parents! Learn what to expect and how to support your child in their first year, as well as tips on how make sure they get the most of their experience on a FIRST Robotics Team. Open to all parents - this talk will recap a year in the life of a Robotics Team Member Parent - as told by 2056 Team Parents, but applicable to all Team Parents from any team.
Jeff Beattie	
The Importance of RF Communication in Robotics	Radio communications is essential for robotic operations. Even autonomous automation requires radio links for feedback, geographic locating, seamless integration to other systems, and validation. The need for effective communication over greater distances for mining, vehicles, flight, and even smaller locations like factory floors demands robustness in radio links. This presentation will explore radio links and provide the first principles for designing effective networks.
Michael J Martin	
Volunteering in FIRST	We will be speaking about ways to get volunteering within the organization, and the different pathways that there are.
FIRST Canada Youth Council Members: Brandon H. & Wren T.	