



Ways to Inspire Conference

September 30, 2017

Orchard Park Secondary School

200 Dewitt Rd, Stoney Creek

L8E 4M5 [map](#)

[Registration on line](#)

Doors open at 8:30am

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

Open house and Store Fronts from 12:30-1:30

Opportunity to see robots and talk with teachers who use them



Pizza and Salad Lunch

\$2.00 Donation

Come if you are a(n):

Elementary or Secondary Student

Elementary or Secondary Teacher

Team member, Alumni, Mentor or Parent

Volunteer or Administrator

Experienced, Rookie or Pre-rookie

Learn about:

Lego - FLL

VEX IQ

VEX

FRC

Curriculum

Clubs

Teams

Events

Strategy

Design

Mechanical

Electrical

Programming

Team Management

District Events

Business

ROBOTS

Browse the



and



table

After 8:30 AM	Registration and Welcome - Cafeteria			
	Group 1 - 60 minute morning sessions			
9:00 AM	Using Arduino to Enrich Elementary Curriculum Enzo Ciardelli - RL Hyslop		Introduction to Solidworks and Mechanical Design Bilal Qadar 1325	2056 Ways to Raise Money Joe Muchynski 2056
	10 minute Break			
10:10 AM		What's Amateur Radio and How can it help? Rod Hardman & Emma Hardman	FRC Judging Best Practices Rhona Breadner	What are we actually Learning at Robotics? Stan Hunter 2056
	10 Minute Break			
11:20 AM	Getting started with Robotics in Elementary and Secondary David Weir & Jeff Adema HWDSB	Incorporating Amateur Radio skills into Robotics Rod Hardman & Emma Hardman	FRC Sustainable Practices Will Alex 2056	FRC Essentials Stan Hunter 2056
12:20 PM	70 min Lunch, Store Fronts, & Open House			
1:30 PM	How to Run a Robotics Program at the Elementary School Level Paul Menicanin Winona	The FRC Control System & Electronics Heather Young 2056	The Perfect Pick List Shankar and Oliver 2056	How to win 23 Consecutive Regionals Tyler Holtzman 2056
3:00 PM	Clean up and Departure			

After 8:30 AM	Registration and Welcome - Cafeteria	
	Group 2 - 90 minute morning sessions	
9:00 AM	Effective FIRST Strategies Karthik	How to win 23 Consecutive Regionals Tyler Holtzman 2056
	20 min Break	
10:50 AM	Programming a 2056 Robot Ethan Elliott 2056	FRC Strategic Design - How to decide your robot Design Malavya Shah & Max Guan 1241/1285
12:20 PM	70 min Lunch, Storefronts, & Open House	
1:30 PM	Pick an afternoon session from above.	
3:00 PM	Clean up and Departure	

- Team Management
- Electrical
- Mechanical Design
- Programming
- Awards
- Elementary Robotics
- Strategy
- 2056 Related

Note: There are 60 minute and 90 minute sessions in the morning and only 90 minute sessions in the afternoon

[Complete the Registration Form Here](#)

Bilal Qadar & Jonathan Parsons **Introduction to SolidWorks and Mechanical Design**
In this workshop we will introduce Computer Aided Design and Solid works with a detailed demonstration of Solidworks and how using CAD will give a team a competitive edge!

Malavya Shah & Max Guan **FRC Strategic Design**
A highlight of how to approach strategic robot design in FRC. Focus on first week of build season with historic examples, and showcasing effective decision-making processes for a successful season.

Enzo Ciardelli **Using Arduino to Enrich Elementary Curriculum**
Arduino is a platform that enables creativity and discovery. This session provides a hands-on opportunity for elementary learners to reinforce curriculum. Participants will build and program projects using a beginner's kit. This session is based on an elementary STEM club's learning.

David Weir & Jeff Adema **Getting Started with Robotics in Elementary & Secondary**
Gain an understanding of how you might use robotics in your school. Links to curriculum, materials and resources you might need for your class or club. Including teamwork challenges and preparing for the board robotics competitions.

Paul Menicanin **How to Run a Robotics Program**
Interested in starting a new robotics club at your school. Learn from one teacher's experience with starting and developing a thriving Robotics program at Winona Elementary School.

Ethan Elliott **Programming a 2056 Robot**
Look at the details of coding for success. Building dashboards, robot controls, iterative programming practices, modular/multi-file programming.

Will Alex **Sustainable Practices**
Successful FIRST programs are built upon sustainable foundations, including mentorship and fundraising. This session will explore best practices towards building a sustainable FIRST robotics team.

Heather Young The FRC Control System & Electronics

Basics of the FRC control system, including hardware, wiring and a variety of sensors.

Rod Hardman & Emma Hardman What's Amateur Radio and How can it help?

What is Amateur Radio? How do get an Amateur Radio Licence? Content Exam, How hard is it? What can I do with a Federal Amateur Radio Licence? Control interfaces, Drone Modifications, Kit Building / Homebrewing Emergency Communications, Radio Direction finding Satellite Tracking / Communications

Rod Hardman & Emma Hardman Incorporating Amateur Radio skills into Robotics

Design skills Antenna design Power (Battery and component systems) Custom Circuit board design Incorporating RF (Radio Frequency) Skills Processor and component technologies used by Amateur Radio Raspberry Pi / Linux Arduino Other specialized components Other fun and usefulness Example: The Perth Space Agency (Designing & Tracking High altitude balloon packages) Example: Using \$35 Amateur Handhelds in the pits (as a higher power communications Example - Using common assemblies as component building blocks

Tyler Holtzman How to win 23 Consecutive Regionals

A look inside the season of Team 2056 covering our build schedule, decision making, design methodology, fabrication methods, techniques and assembly practices.

Stan Hunter What are we actually learning at robotics?

We will take a look at the wide spectrum of skill and knowledge opportunities when involved in a robotics team.

Stan Hunter FRC Essentials

What every rookie or pre-rookie team needs to know to be successful.

Joe Muchynski 2056 Ways to Raise Money

Some tips and tricks for raising funds for your robotics team.

Karthik Kanagasabapathy Effective FIRST Strategies

Strategic Design, Scouting, Match Strategy

Shankar Manoharan & Oliver Mao The Perfect Pick List

How to make winning picks

Rhona Breadner Judging Best Practices

We will cover things to considered when preparing for the judges at an Ontario district event. Second half of the time will be a Q & A.

Note: Sessions may be cancelled or moved depending on demand