

2022 FLYSET Hybrid FTC Workshop

8:30 AM	Welcome		Auditorium
8:30-8:55	Guest Speech #1: Mobile Edge AI with IBM & Boston Dynamic Spot	Brady Steele & Sri Karaturi, IBM	Auditorium
8:55-9:20	Guest Speech #2: FIRST Alumni: How FIRST got me here	Jackie Hall, USC Aerospace Engineering	Auditorium
9:20-9:30	Break (Drawing #1)		
9:30 AM	FIRST Tech Challenge World Championship Track	Anthony 8565	Auditorium
9:30-9:55	Roads to winning world championship	Delta Force 17713	Auditorium
9:55-10:20	World Championship Recap	Technical Difficulties 7172	Auditorium
10:20-10:45	Design Brainstorming: What makes a good robot design and how to choose o	Clueless 11212	Auditorium
10:45-10:55	Break (Drawing #2)		
10:55-11:10	Operating as a school club and sustainability	Cuttlefish 6165	Auditorium
11:10-11:25	Sensor fusion	Kurocity 12635	Auditorium
11:25-11:40	Journey of the season and where our team is	Java the Hutt 14725	Auditorium
11:40-11:55	Ultimate goal game programming in virtual robot simulator	Quality control 21229	Auditorium
12:00	Drawing #3		
9:30 AM	FIRST Global Challenge Carbon Capture Track	Melody 8565	Room 900
9:30-10:00	Sensing in Service of Society	Dr. David Lary, Univeristy of Texas at Dallas	Room 900
10:00-10:30	Carbon Capture Theme Guest Speech	Subbijoy Dutta, S&M Engineering LLC	Room 900
10:30-10:40	Break (Drawing #4)		
10:40-11:10	Design Process and Climb Overview	Robonauts, FRC 118	Room 900
11:10-11:30	FGC Field Build Experiene	Team USA/Team Romania/Team Turkmenista	Room 900
11:30-12:00	REV kit of parts experience exchange	All Paricipating FGC teams	Room 900
12:00	Drawing #5		
12:00 - 1:00	Lunch		Activity Center
1:00-1:05	Welcome Speech		Activity Center
1:05-1:35	Keynote Speech: North Texas League Play for PowerPlay Season	Lon Cherryholmes, North Texas PDP	Activity Center
1:35-1:45	Break		
1:45 PM	Beginner Technical Track	Daniel, Melody 8565	Room 910
1:45-2:00	Six wheel drive with Gecko Wheels	Derek, 8565	
2:00-2:15	Walking Spider Robot	Andrew, 8565	
2:15-2:30	Steamline FTC Coding with Kotlin	Hrithik/Byron, 8565	
2:30-2:45	Belt and Pulley Linear Motion: a different approach	Joseph, 8565	
2:45-3:00	Break (Drawing #6)		
3:00-3:15	Study of Custom Differential Gearbox for multiple actuators	Daniel, 8565	
3:15-3:30	Drivetrain wheel enhancement	Area 52, 18227	
3:30-3:45	Field centric drive	Area 52, 18227	
3:45-4:00	Conversation with Head Referee	Dr. Patrick Michaud 7172	
4:00 PM	Drawing #7		
1:45 PM	Advanced Technical Track	Anthony, Shuopu 8565	Room 918
1:45-2:00	A New Differential Linear Slide	Technical Difficulties 7172	
2:00-2:15	Finite State Machine Implementation with Hashmaps	Ryan, 8565	
2:15-2:30	Beyond FTC, Iron Reign's Mechavator	Iron Reign 6832	
2:30-2:45	Fast and Furious: Rapid Roadrunner Route Creation	Anthony, 8565	
2:45-3:00	Break (Drawing #8)		
3:00-3:15	Using Everyday Materials from Home Depot	CDA Lions 16176	
3:15-3:30	Kalman Filter for better localization	Michael, 8565	
3:30-3:45	Autoaim and Distance Estimation with Tensorflow	Everett/Victor, 8565	
3:45-4:00	Precise GPS Navigation for Off-Road Mobile Robots	Karim Virani 6832	
4:00 PM	Drawing #9		
1:45 PM	CAD Track	Max, 8565 / Sophie 18227	Room 900
1:45-2:00	3D Modeling	Marvels of MAS, 19564	
2:00-2:15	3D Modeling and Animation with Solid Edge	Max, 8565	
2:15-2:25	Break (Drawing #10)		
2:25-4:00	Fusion 360 CAD Training	Bud, 9010	
1:45 PM	OpenCV Lab	Michael/Ryan, 8565	Room 920
1:45-2:00	Setup Environment		
2:00-3:00	Introduction to OpenCV	Michael, 8565	
3:00 PM	Break (Drawing #11)		
3:00-4:00	OpenCV Countour Analysis	Ryan, 8565	
1:45 PM	Marketplace and Demos		Activity Center
1:45-4:00pm	Marketplace	Jessica, 8565	
1:45-4:00pm	FTC Robot Driving experiences	7172/8565/18227/19564/19567/19587/21127	