

July 19, 2024



It's week 5 here at Robotics Camp, and our campers were geared up every day for a great experience.

We started off with introductions and instructions, and once the kids started building their robots, there was no stopping them! We are always amazed how creative and hard-working they are with team spirit to boot! Mid-week brought a visit to the Cranbrook Institute of Science, where a special presentation was shown in the Planetarium, and on Wednesday they went to the Natatorium, accompanied by all our counselors for a fun swim!

We thank you for sharing your children with us this past week and hope you enjoy the following details about their time here at camp.

WeDo & Boost '24



Miss Elizabeth, Mr. Mac, Ms. Soheila, Miss Isabella, and Miss Lyric worked with our youngest two groups of campers this week in our WeDo and Boost groups. Using digital build instructions and coding software on their iPads, each camper chose individual projects to work on during the week. They built cars and other mechanical creations with enthusiasm and remarkable talent!

This is **Aria's** second week here at robotics camp, but first full week. Aria worked very hard all week to make her cat robot. She spent most of her time with her twin sister Ester, but also enjoyed making new friends. Aria enjoyed swimming this week, having snacks with her friends, and playing outside during breaks.

This was not **Axel's** first week at camp, and it clearly showed as each week he becomes more and more independent and adding complexity to his building and coding. Axel has gotten faster at building as well. He finishes his projects with ease which allows him to spend more time coding and driving with friends which he enjoys. Axel is a bright light from the moment he steps out of the car and a fun contributor to our Boost camp each week.

Blake is a strong builder with a bright smile. This is Blake's first week at camp, but he worked extremely well in the WeDo group. He likes to build very independently and occasionally ask his friends or instructors for pieces when needed. Each day Blake brings a new stuffed toy with him to camp which he happily introduces to the class each day. We enjoyed having Blake here this week and we hope to see him and his brother again soon.

Charlie has always been a strong builder, and he is also a strong friend to have. Charlie is extremely supportive to his peers, especially cheering on Aria in her building. Charlie finished his projects earlier in the week and enjoyed coding and playing with his robots. Instructor Ms. Michelle really missed Charlie when he was gone and was very happy to welcome him back this week.

Ester is a great builder able to complete each daily checkpoint and beyond. We are very happy that Ester decided to join us for another week, as her first week was not a full one. This week she was able to fully build her entire robot which was a very impressive accomplishment. Ester enjoyed swimming with her friends and having snack with them as well.

Franklin finished his project early which allowed him more time to code and help his friends build. He decided to sit with Luca again and the two got along very well. He enjoyed going to the CIS planetarium with his friends Luca, Axel, and Ollie which was a special activity we had this week. Franklin is a big helper at camp which we really appreciate. Campers enjoy playing with Franklin at breaks because he is such a fun friend to be with.

Graham was also part of our awesome WeDo group this week. Graham worked very hard to complete multiple robots this week. He sat with his friends Blake and Owen who he got along with well. Graham is a very good listener always paying close attention to rules and directions which is always much very appreciated. Since finishing his project early this week, he has enjoyed coding and driving his robot with his friends.

Grey chose to start the week in WeDo but very quickly switched to Boost. Grey enjoyed building a car and working very hard to complete each daily checkpoint. Although getting a later start, he still managed to complete his final project on time. Grey is very attentive and always listened to the rules and directions which helped him have a very successful camp experience.

Jameson and Peter were practically inseparable all week. They enjoyed spending breaks together and the two were often seen laughing and having very engaging conversations at lunch as well. They were placed in the same Science Museum group and really enjoyed watching the planetarium show together. They are each strong builders especially given that it was the first week of robotics camp for both of them.

We enjoyed having **JT** back at camp this week and watching him do a great job building his robot. He is a bright light and always cheers up the room with his bright smile. JT also entertained us with many jokes throughout the week. He enjoyed humming to our classical music in class and is a fun camper for the others to be around. He also liked playing with a lot of other campers at lunch... especially Axel, Luca, and Franklin.

This is **Luca's** 5th week here at Robotics Day Camp and he becomes a stronger builder every week. This week he built his robot with added extensions since he finished the standard build early. He met each daily checkpoint with ease which we were all very proud of him. Each day, we look forward to seeing Luca's smiling face as he stepped out of the car to come to camp. Since he is an experienced camper, other campers often looked to him for help which he was very willing to give.

This is **Lucy's** second week at robotics camp, and we were happy to see her back! This week Lucy built the guitar which she was very happy to finish. Lucy is a camper that everyone gets along with easily. Lucy can play and get along with anyone which is an admirable trait as a camper. We hope to see Lucy here again as we believe she would really enjoy experimenting and learning even more about robotics.

Luke was part of our WeDo group this week where he built several robots throughout the week. He enjoyed playing with all the campers at his table and was an easygoing friend who other campers gravitated towards. Luke is a good listener, always following directions the first time they are announced. Mrs. Wendy, who works in the camp office, knows Luke's parents and was very happy to see him this week.

Maddie is a very bright soul that we adored having at camp. Each day Maddie came with a big smile on her face that lasted throughout the day. She was our only girl in our WeDo group but got along with all the boys with ease. She enjoyed swimming in the pool and playing outside with anyone who wanted to play. The first day Maddie came to camp with some makeup which we all thought was very cute.

Mickey was part of our WeDo group this week and worked very hard to complete his robot. We enjoyed having both Mickey and his brother Leo at camp together and hope to see them again soon. Mickey is very focused while he is working, but also very good at listening to directions. He was often the first to start cleaning up and the first to line up at the door. He has a sweet and infectious smile.

This is **Ollie's** second week here at camp and we were so happy to see him back. We watch for him and his dog every morning as a great start to the day. Ollie easily made a lot of new robotics camp friends this week. He worked extremely hard to complete his robot throughout the week, and we are very proud of his accomplishments. This week he was able to build faster and very confidently which we loved to see.

We were happy to see **Oscar** back at camp this summer, as we were checking the rosters each week anticipating his appearance at some point. Oscar is a fun and super friendly camper we all enjoy watching and interacting with. Oscar is always eager to help those around him in building as well. Oscar decided to build a car this week, with many creative features to enhance the build. He enjoyed spending time with Mrs. Wendy in the office and with returning instructors such as Ms. Joanie and Mr. Mac.

Owen is a strong builder who enjoyed working very independently throughout the week. He is a great listener and followed directions without any delay and without any complaints. Owen worked very hard to successfully complete several robots that he then coded and drove with his friends' robots. We really enjoyed having Owen in camp this week and hope to see him again.

Teddy or the "cheese man" as he called himself was extremely entertaining to have in camp this week. He spent his time building in the WeDo group where he built several robots. Teddy went around to all the camp instructors spreading the "cheese touch" which was a fun game that everyone participated in all week. Teddy also enjoyed swimming and enjoyed his time at the Cranbrook Science Institute.

Thatcher is a very fast builder and finished his guitar very early which gave him a lot of time to add multiple extensions to enhance his build. Thatcher is clearly a very experienced Lego builder and accustomed to following digital instructions. We enjoyed waiting for Thatcher's car each morning to see him and his dog. Thatcher was a model camper to have at robotics camp.

Vex Go '24



This week's theme in VexGo was superheroes! *Miss Elizabeth, Miss Joanie, Miss Sophia, Miss Michelle, and Miss Tanusree* had so much fun picking out superhero themed projects for the campers. They built claws, drawbridges, and cars to rescue the robots.

Alex was a happy camper the second he walked in. His injured pinkie did not hold him back and he easily completed all the projects including the claw and code base car. He had a fun time playing outside during snack and recess and loved going to the science museum to watch the planetarium show. Alex won the first Mr. Beast challenge at recess. Congrats Alex!

Auggie's third week was once again great! He was consistently focused on building his projects and rarely wanted help from instructors. He loved to play outside during our breaks and was always attentive in listening to directions. He enjoyed going to the planetarium to watch the show. We loved seeing him add new features to his robot every day!

Bridger is a hardworking and focused camper. He brings happy energy to the classroom every day, is kind to other campers, and listens carefully to directions. He loved using the iPad remote control to drive his car and park, as well as playing hangman. We look forward to the rest of the week with Bridger!

Caroline loved driving her robot around the room. She liked partaking in races and enjoyed the claw machine game. She was very respectful all week and always joined in on activities during recess and lunch. We enjoyed talking to her every day and hearing her various ideas to improve her robot!

Carter was a very hard worker everyday throughout the week. He always respectfully talked with others and joined in on fun discussions at lunch and recess. He was always warm to other campers and engineered a sturdy car code base. We all loved how excited he was when he finished his robot!

Charlotte really enjoyed building her robot code base and practicing driving her robot around different terrains. She likes playing with the other campers and always respectfully talks to others. She worked extremely hard on her robot and was really excited when she finally finished it! We always looked forward to seeing Charlotte at camp!

Erik had an exciting second week at camp! He continued working on his coding and building skills by creating his car code base and participating in various challenges. He liked talking to all the campers and counselors and always liked playing the recess games outside. He liked collaborating with Ziad throughout the week to share ideas.

Gavin had a really fun week and loved talking with the other campers and counselors. He was always excited to come to camp and looked forward to building, coding, and all the other camp activities. He also loved the science museum planetarium show and always had a smile on his face!

Jonas really enjoyed playing with other campers throughout the week with his robot. He really enjoyed the claw machine game where he got a score of 24! He is a hard worker and always participates in recess games. He works well with others and is always sharing new ideas with everyone. He is very respectful when he plays and talks to campers and counselors and likes to think outside the box.

Krishan is a bubbly and energetic camper. He always has a smile on his face and is kind to others around him. He listens to directions well and likes collaborating with Rami on his robot builds. He likes participating in recess games like hangman and is always brightening everyone's days. Everyone really enjoyed having him at camp this week!

Leo enjoyed playing with other campers this week especially when they were driving their robots around. He liked collaborating with Zach and Theo to share ideas on how to improve their robots. He created a robust car that could withstand all different terrains and was really proud of his creation. He also really liked the planetarium show at the Institute of Science.

Miles had a fun week playing with the other campers and their robots. He showed respect to all counselors and campers and liked joining in on recess games like hangman. He built a sturdy car that he used to play soccer and score goals with the other kids. He enjoyed looking at nature outside on our walks and was genuinely interested in everything he did at camp.

Naomi is very independent and a dedicated hard worker when it comes to building her robots. She never hesitates to ask for help and always listens to the instructors. Naomi is very kind and enjoys building the robots with the other campers. She was able to finish her robots and worked hard during build time. She likes participating during recess games like hangman and chooses kindness every day.

Omar's second week at camp has been awesome. He is so kind to others and builds his robots easily. He was very proud when he successfully finished the claw piece on his robot. He is an especially good listener which was evident when we observed how he respectfully he responded to other campers when they were sharing their ideas.

Rami is a playful and fun camper. He likes singing Ed Sheeran for us in the classroom and always brings positive energy to the class. He is also attentive and listens carefully to directions. He didn't have any trouble building the projects we picked out for this week. We loved seeing his excitement to build and improve his builds.

Theo is very hardworking and likes to complete his projects all by himself. He is great at listening to instructions and kind to the instructors and other campers. Theo is a hangman master and loved going to the science museum planetarium show this week. We liked to see how excited he got when he finished his builds.

Zach had a fun time at robotics camp where he created a car robot with a scooping feature. He liked working with other campers and also focused well during build time. He liked participating in recess activities and was excited when he finished his car. He always listened to others when they spoke during group time.

Z had another really fun week at camp! He liked working with Erik on improving his robot code base and was very respectful throughout the week. He loved talking about his cousins and his trip last week, and really enjoyed watching the planetarium show at the science museum. We enjoyed having Z another week at camp and loved seeing him grow in his engineering and coding skills.

Harrison did an amazing job this week despite coming in late! He built a very robust robot and completed the Hour of Code challenge. He was really excited to play football during recess and lunch and always joined in on the games with other campers. He was a very happy camper and liked to think outside the box. We loved having him here this week!

Vex-IQ '24



Our Vex IQ instructors **Mr. Bobby**, **Ms. Grace**, and **Mr. Vik** led by **Mr. Elmer** have all really enjoyed working with the campers this week. It was an energetic and ambitious group! All the teams learned engineering design concepts and the coding necessary to build a competitive robot in preparation for the VEX IQ competition on Friday. While a few students came in with prior experience with VEX IQ, most were new and did an excellent job problem solving and practicing to increase their understanding and abilities.

This season's competition is called "Rapid Relay". The object of the game is to score points by clearing switches, passing balls and scoring balls. Campers chose to either build a robot called 'Swish' from instructions, or to create their own design. Robots were programmed using a graphic software called VEXcode IQ, which is based on the Python programming language.

Yanbo and Gavin teamed up to build a modified robot with a design of their own creation. They disassembled Yanbo's Swish robot from Week 1 and changed their robot base to have a chain drive with a gear ratio of 3:2 to make their robot faster. Both campers showed great enthusiasm and creativity as they worked together.

Alex and Brett made improvements to Alex's Swish bot and spent a lot of time practicing driving to improve their Skills score, showing their enthusiastic personalities as they worked together. They also created an autonomous program that can score goals without a human driver.

Evan and Jad teamed up to build a Swish bot. They found parts with different colors to set their robot apart from the others, aptly calling themselves "The Color Crusaders." They also modified the Swish design by adding a structure at the back of the robot to help it align with the goals.

Abby joined Adelaide this week. To gain building experience, they disassembled Adelaide's previous robot and built a new bot with intake rollers and a ramp to score in the low goals, paying close attention to the details and collaborating closely to ensure their success.

Austin and Joey teamed up and built a version of Swish, paying close attention to get the details right. Both displayed patience and focus to get the robot built and debugged. The duo built unique triangle wings to help line their swish bot up to the goal to make accurate shots.

Jeremiah and Nicholas worked side by side to build two similar robots with intake rollers and a ramp to consistently score in low goals. They experimented with the gear ratio of their drivetrains to find the optimal setting for driving fast and reliably.

Jack and Noah teamed up to build a robot. They considered different ideas before deciding on a robot that scores high goals, choosing to reference the Swish design for their build. They made some design enhancements to improve the shooting accuracy and spent some time coding an autonomous program.

Hudson joined Garden, and they disassembled Garden's Swish bot from the previous week to gain more building experience and make further improvements. Garden was particular in choosing colorful pieces to create his new robot.

Owen and Avery teamed up to build a Swish bot. They built their robot carefully to make sure it worked well. By problem-solving together without requesting much help from others, they were able to develop their building skills and self-direct their process.

Julian joined Emmet to build a Swish robot this week. They demonstrated the ability to work efficiently and independently. They quickly finished building and spent a lot of time developing their driving and autonomous coding skills.

Ying and Yu worked together to build a robot with a double intake in the front and a ramp and a set of rollers to score the balls. They displayed adaptability as they previously used a Swish robot and decided to switch designs.

William and Matthew teamed up to build a Swish bot and use rubber bands to adjust the trajectory of the ball and also programmed the automatic loading mechanism, so they didn't have to reset the arm after launching it.

At the Cranbrook Institute of Science on Tuesday, campers watched a show at the planetarium. On Wednesday, the campers enjoyed a break from robotics and the heat by swimming at the Natatorium.

As week five of camp comes to an end, the campers had a very enjoyable and successful time exploring both engineering and robotics, while most importantly being able to make new friends and fun memories. They will finish the week by participating in a VEX IQ Rapid Relay tournament, where they can demonstrate their robots in official Teamwork Challenge rounds and Skills runs.