



NEURODIVERSE NETWORKS

In alliance with PAFN

Pacific Autism

Family Network



Join our Neurodiverse Robotics Program this summer!

Neurodiverse Networks has partnered with PAFN once again to deliver a robotics program consisting of four workshops for neurodivergent individuals who would like to explore Science, Technology, Engineering and Mathematics (STEM). Participants will have the opportunity to build, program, and participate in a challenge with VEX robots in a fun, engaging environment.

Who are our workshops for?

Our workshops are for neurodivergent individuals, who in Summer 2024 will have either completed or be entering grades 8-12. However, this a general guideline and we are open to accepting participants who may be younger or older.

Where will these workshops take place?

The workshops will be held at the Pacific Autism Family Network (PAFN) Richmond hub, located at 3688 Cessna Drive, V7B 1C7.

How much do the workshops cost?

The workshops are completely free. We are accepting a maximum of 10 participants per workshop.

When will the workshops take place?

The program has 4 sessions, each session is about 1 hour. Please note that when participants register, they will be registering for four sessions over the span of 4 weeks in May, June, July or August (**every Monday with exceptions due to holidays**). See our summer dates and times below:

	May 6 – 27	June 3 – 24	July 3 – 22	July 29 – August 19
Day 1	Monday 6, 4:00 – 5:00 pm	Monday 3, 4:00 – 5:00 pm	Wednesday 3, 10:30 – 11:30 am	Monday 29, 10:30 – 11:30 am
Day 2	Monday 13, 4:00 – 5:00 pm	Monday 10, 4:00 – 5:00 pm	Monday 8, 10:30 – 11:30 am	Wednesday 7, 10:30–11:30 am
Day 3	Wednesday 22, 4:00 – 5:00 pm	Monday 17, 4:00 – 5:00 pm	Monday 15, 10:30 – 11:30 am	Monday 12, 10:30 – 11:30 am
Day 4	Monday 27, 4:00 – 5:00 pm	Monday 24, 4:00 – 5:00 pm	Monday 12, 10:30 – 11:30 am	Monday 19, 10:30 – 11:30 am

How can I register?

Please use this form to sign up: <https://docs.google.com/forms/Neurodiverse-Robotics-Workshop>. If you have any other questions and/or concerns please contact Dyllan Mand at neurodiverserobotics@gmail.com or manddyllan@gmail.com. Feel free to also visit our website at <https://www.neurodiverserobotics.com>.

VEX Robotics Workshops

	DAY 1	DAY 2	DAY 3	Day 4
Vex	Build Session	Build Session (continued)	Programming Session	Competition Day

Day 1: Introduction to the program. Participants will begin building their robots using a set of instructions to follow along while being encouraged to incorporate their own mechanisms.

Day 2: Participants will continue building their robot. On this day, programming will be introduced through a brief lesson.

Day 3: If interested, participants will complete the building and programming aspects of their robot.

Day 4: The program will conclude with an exciting competition for participants to test their robots.

Building a VEX Robot

The participants will be given a VEX IQ kit that includes an instruction manual to follow the design they will build. The manual contains both simple and complex designs. Participants will be encouraged to choose one of the designs available, while incorporating their own ideas. VEX IQ is a plastic snap together construction system that makes for an easy build. The pieces are very similar to Lego and do not require any additional tools than the ones provided in the kit. These kits are used to accommodate the challenges that neurodivergent individuals might face with their fine-motor skills.

Coding a VEX Robot

The participants will be presented with a lesson on the basics of coding and what aspects they will be using to code their robots. The participants will be working with “drag & drop” or text-based coding provided by VEXcode IQ, which is the language the robot uses to understand its commands.

This session will engage the participants in the programming aspect of creating a robot.

VEX Competition

Finally, the participants will conclude their workshop with an exciting competition to test their robots and compete with friends. We offer a variety of different challenges including mazes, stacking challenges and Tag Bots—a competition that involves the use of sensors to engage in a game of tag. When a robot's sensor is touched, they lose a life. After they have lost all three lives, they are out. The last robot standing wins! Through this competition, the participants will understand the application of robots.

