STEAM Conference 2024

science | *technology* | *engineering* | *art/architecture/agriculture* | *mathematics*

Workshop Sessions

***HIGH SCHOOL ACTIVITIES:**

Retro Space Invaders: Code Video Games with Scratch! --
Presenters: Are you a gamer? Then what about making your own game? In this session we will develop and design a video game using Scratch!

Drawing with Code: A Look at Processing! -- Location:
Presenters: Do you like drawing? Have you heard of graphic designing? You can use computer programming in Processing to create shapes and designs such as popular logos in video games!

Robot Wars! Explore LEGO Robotics! -- Location:
Presenters: Have you competed in a full blown robotics competition? Would you like to? This session will explore the world of VEX world competition through test scrimmages.

My Calculator Can Do WHAT?: Turn Your Calculator into a Robot! -- Location:
Presenters: You use your calculator for all kinds of mathematical procedures, but did you know that you can use it to control certain physical objects? In this session we will learn the steps to program a TI calculator to control a car!

LED UV Light - Location:
Presenters:
That pesky dark giving you problems? Need some ultra cool ultraviolet light to reveal your invisible ink messages? Join us in building your very own UV LED Night Light and discover what you can make glow in the dark!

Trinket bot - Location:
Presenters: Have you ever wanted to control electronic devices with your mind? Try the next best thing with the "Trinket Bot" and explore the ways you can control external devices like a rover, a set of traffic lights, and even your enemies' cell phones! Join us in controlling the world!

Art Bot - Location:
Presenters:
Lets jump into the world of robotics! Have you ever wondered how was it possible to create an artificial contraption that would mimic a portion of a human's characteristics? Moreover, have you wondered, in what ways are both subjects of circuitry and vibrational movement important to robotics? Well this workshop will answer those major questions and you will get to build a vibrating Art Bot that will draw it's own picture on a piece of paper!

Go Go Gadget Light! -
Presenters:
Become a secret agent with your newly built gadget! You can now test if materials can conduct electricity. But quiet…this mission is top secret. In this workshop you will step into a secret spy lab to build your tool (gadget), which

will help you to identify which materials conduct electricity. And you get to take the gadget with you for all your future missions!

Circuit Monster - Location:
Presenters:
Rawrrrr! A foam monster that lights circuit monsters up!? Have you ever wondered how foam is made? Or how an LED light could light up your town!? In this workshop you are going to make your own foam monster through a series of chemical reaction. You will build a circuit with LED lights, to light up your foam monster. When you are done you will have your own "Circuit Monster" to take with you!!! Rawrrrr!

Turbo Mousetrap Car "Need for Cheese" - Location:
Presenters:
Catch that mouse! No, move that car! That's right! In the mousetrap car workshop we will explore ways in which to power a car without using batteries! You guessed it! You will be designing and making a functional car using a mousetrap to power it, and the best part is you will be able to take it home with you when it is finished!

Light up your life: Multi Color LED's! - Location:
Presenters:
Fun bright funky lighting is one of those things that we love to move and swing around at concerts, night time festivals and Christmas. Designing and making your own LED Lights can be fun and easy to do. In this make and take workshop illuminate your learning on how to make a creative multi color LED light where it will bright like a diamond.

Blast Off! Rocketry 101 - Location:
Presenter:
On planet Earth we get around with cars, planes and El trains. But, if we want to travel like an astronaut in space we need to use and understand rockets. In this workshop join a space scientist to learn how NASA's rockets can travel in outer space. Then make your own rocket and try it out on our special high-powered launching pad."

Solar USB - Junior Research Scientists - Location:
Presenter:
Play-Doh? More like Play-Woah! Use Play-Doh to create your own messy, squishy circuit! Mold your circuit to make anything you'd like and use the basic principles of electricity and circuitry to light up your creation with an LED light!

Squishy Circuits - Location:
Presenter:
Play-Doh? More like Play-Woah! Use Play-Doh to create your own messy, squishy circuit! Mold your circuit to make anything you'd like and use the basic principles of electricity and circuitry to light up your creation with an LED light!