

# GIRL SCOUT BADGE DAY

**TOTAL HOURS : 24 hrs (8 hrs per person, 3 people)**

## SUMMARY

This event invites all Girl Scouts of Central Texas to attend and participate in STEAM-centered workshops to earn science-themed badges.

WHO	WHAT	WHEN	WHERE	WHY
Girl Scouts of Central Texas, K-8	Coding camps, Robot demonstrations, STEAM projects	September 29, 2018	Science Mill ( <i>science museum</i> ) at Johnson City, TX	Engage students in STEM

## ACTIVITIES

### ROBOT DEMONSTRATION

We will be bringing in our robot from the 2017-2018 Relic Recovery season. We will be teaching kids about structure and function, the competition, and what we do in robotics. Ideally, exposure to the program and its components will inform students and parents about opportunities for them to get involved in STEM and encourage them to participate.

### TALKING ABOUT *FIRST*

Brochures explaining *FIRST* and its programs will be passed out to students and parents. Additionally, members will be answering any questions that the parents may have about robotics.

### SCRIBBLE BOTS

<https://lemonlimeadventures.com/scrabble-bot/>

Simple make-and-take robot composed of a motor, paper cups, and pens. The final creation spins and struts on a table while also leaving behind drawings that display its movements.

Ajax Scientific Round Mini Motor 1.5-3V, 8.5mm Shaft Length x2 (\$16)

Clothes pins, cups, markers, tape, glue, 9V battery / holder

## BUDGET

Motors (\$18 for 10)

Batteries (\$10)

Wires (\$8)

Cups, markers, tape (*already have*)

## **OUTCOME**

### **PARTNERSHIP WITH SCIENCE MILL**

<https://www.sciencemill.org/>

*“The Science Mill is a family destination offering a fun, interactive learning environment for all ages. Through cutting-edge technology-based exhibits, games, and programs, the Science Mill expands students’ understanding and appreciation of science in their everyday lives. By igniting their curiosity and inspiring them to pursue post-secondary education, the Science Mill experience starts students on the path to a life-long career in science, technology, engineering, and math (STEM).”*

### **PARTNERSHIP WITH GIRL SCOUTS**

We will be working closely with the Girl Scouts of Central Texas.

### **PROMOTING WOMEN IN STEM**

One of our major causes this year is promoting women in STEM. This event is a great way to reach out to a community of young girls and spark an interest for STEM within them by appealing to a child’s desire to create and solve problems. This is one of the steps we are taking to inspire the future generation of female tech leaders and innovators.

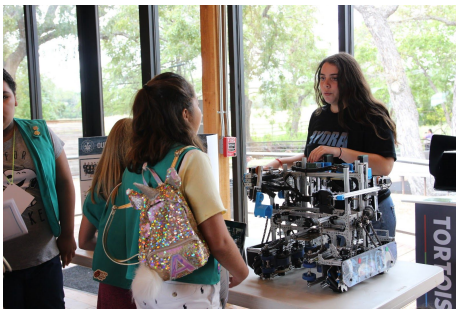
### **EXPOSING YOUTH TO STEM PROGRAMS**

The most effective way to get children involved in the STEM field is by exposing them to programs that allow them to explore topics in science, technology, engineering, and mathematics. By granting students creative freedom and encouraging them to solve problems in innovative ways, students will be better prepared for the future and possibly find a passion for STEM in the process.

### **PROMOTING *FIRST***

This event will allow us to spread recognition for *FIRST* and its programs. We have created brochures that explain *FIRST* values and programs, and includes information regarding how parents and students can bring the program to their communities.

# POST-EVENT REFLECTION



- There were **400 total attendees**, **195** of which were Girl Scouts. We had the opportunity to introduce girls all across Central Texas to *FIRST* programs and the world of STEAM.
- We handed out **100 brochures** to families and troop leaders, and several of the parents were interested in recreating this STEAM experiment in their own communities, as well as inviting us to their area.
- Our members worked with several waves of group of up to **10 Girl Scouts at a time** within the span of **six hours**.
- Students were engaged in a **hands-on learning experience** and a unique opportunity to **build their very first robot**. Many of the girls were drawn to the implementation of art into STEM, and their eyes lit up when their robot worked and drew them a unique picture.
- **Summary:** We connected with **Science Mill** and the **Girl Scouts of Central Texas**. Students were **introduced to *FIRST*** and learned the basics of **hardware, circuits, and problem-solving** with our Scribble Bots activity.