



# WE CU VOLUNTEER

## Youth Volunteer Recognized

South Carolina 4-H'er Nikole Rivers named Distinguished Finalist for a Prestigious Award



The Prudential Spirit of Community Awards is a nationwide program honoring young people for outstanding acts of volunteerism. The program judges recognized four South Carolina students in February 2018 as Distinguished Finalists for their impressive community service activities. Each finalist will receive an engraved bronze medallion. Nikole Rivers of Dorchester County 4-H (was

recognized for efforts in preserving history. Nikole is pictured above in the center wearing her Girl Scout uniform with 12 military veterans. She recruited and interviewed 29 local veterans to create a documentary called "Our Veterans: FOREVER Live Our Dorchester County Heroes." We are proud of her hard work and contribution to her community!

### Upcoming Statewide Programs:



**Legislative Day**  
**Tuesday, March 13, 2018**  
 opportunity to meet legislators and celebrate of 4-H (for older youth)  
**Register by March 1st**



**Engineering Challenge**  
**Saturday, April 14, 2018**  
 compete in a variety of STEM-based challenges (for 9-19 year olds)  
**Register by March 23rd**



**Small Garden Project**  
**April - July, 2018**  
 statewide, independent-study project about gardening (for all age divisions)  
**Register by April 13th**



**Sporting Clays Tournament Fundraiser**  
**Friday, June 1, 2018**  
 our primary statewide fundraiser for SC 4-H programs (for adults & youth)  
**Register by May 23rd**



**State 4-H Congress**  
**July 11-14, 2018**  
 Wildlife Habitat Education Program (WHEP) training (for ages 14-18)  
**Register by June 25th**

"Learn by Doing!" 4-H Slogan



In April, 4-H'ers across the nation will participate as True Leaders in Service in multiple community service projects, culminating in a National 4-H Day of Service on Saturday, April 28, 2018. Help us celebrate this important time by registering local service events throughout the month of

April on the National 4-H map!!! More information can be found at [True Leaders in Service, National 4-H Council webpage](#).

Register Your Event

2017 Infographic



# JOANN partners with local 4-H clubs

by Lori Thomas, 4-H Volunteer, and Jennifer Scales, Charleston/Dorchester Co. 4-H Agent

## Introduction

JOANN is helping 4-H bring more hands-on programs to local communities across the nation to inspire kids to lead lives with their hearts, hands and minds. Current & lifetime members, parents of members, volunteers and 4-H staff can save 15% off total in-store and online purchases every day with 4-H Rewards. JOANN will give a minimum of 2.5% of every eligible transaction to support 4-H programming. To learn more, visit:

<http://www.joann.com/4-h/>

In addition, the 4-H Explorers Club members in Dorchester County teamed up with JOANN's of Summerville, SC for the February 3<sup>rd</sup> Valentines Craft Day. The kids and parents encouraged customers to stop by the 4-H table and make a card for a local senior at the St. George Nursing Home. Over 65 Valentine's cards were made! The club made a few more to ensure everyone at the home got a card this Valentine's Day.

Thank you to: Zachariah, Taylor, Tyler, Maggie, Macie, Brianna, Frank, Nora, Clara, and John Michael. A huge thank you to Mrs. Melissa Wright, who manned the table and jumped right in to being a 4-H Parent/Volunteer/Leader. We had two families ask about joining our 4-H club and two other families ask about joining 4-H in Summerville. It was a HUGE success!

Update: 80 valentines were delivered to St. George Nursing Home by 4-H members on Valentine's Day.



4-H Explorers Club members at JOANN's Valentine Craft Day event on February 3, 2018 (top) and delivering Valentine's Day cards from the JOANN's event to the St. George Senior Center (bottom).  
Image credit: Lori Thomas, 4-H Volunteer



## Volunteers and STEAM Fair exhibitors needed!!!

We need your help recruiting volunteers and exhibitors, managing logistics, and leading hands-on activities for the 2018 SC 4-H Engineering Challenge on Saturday, April 14, 2018 in Columbia, SC. (You don't have to be a STEM expert to help us out during this big event!!!) Contact Katie Burch ([korishe@clemsun.edu](mailto:korishe@clemsun.edu)).



THE 2018 SOUTH CAROLINA  
**4-H ENGINEERING  
CHALLENGE**

# South Carolina attends National Youth Summit Series

## Introduction

The National Youth Summit Series is hosted outside Washington D.C. at the National 4-H Conference Center in Chevy Chase, MD. The Summits bring together some of the best and brightest students to focus on maker, healthy living, and agri-science. Designed for high school students (grades 9 - 12), the Summits provide opportunities to learn technical skills, participate in hands-on activities, workshops and learn from leaders in the field. South Carolina participation in these summits was funded by grants and other donations.

## Maker Summit: November 2-5, 2017

The Maker National Youth Summit is for the creative and curious young minds of the next generation of innovators. Participants make what they can with a variety of materials from a range of fields, utilizing their resourcefulness and creativity. Jeffery Feaster and Hannah Earhart of Fairfield County represented South Carolina 4-H, along with chaperone Dawn Stuckey, Colleton/Hampton County 4-H Agent and SC 4-H Science Committee Chair. After trying activities at Maker Summit, Jeffery is excited about the idea of using them to help bring CS to kids in his community. He said, "I would use it for middle school especially. Everyone knows Google and they like the logo, so it would be great."



Jeffery Feaster (left) and a friend test out a powerful 3-D printed phone camera microscope as part of National Youth Maker Summit. *Image credit: National 4-H*

## Agri-Science Summit: January 12-15, 2018

At the National Youth Summit on Agri-Science, students develop the skills and knowledge needed for the challenges facing agriculture, food security and sustainability. This Summit emphasizes hands-on educational experiences led by experts in the agricultural community. Bella Birket of Kershaw County, Rachel Ann Cathcart of Union County, and Garrett Ulmer of Colleton County represented South Carolina 4-H along with chaperones Mark Cathcart, Union County 4-H Agent, and Beverley Connelly-Brown, Beaufort County 4-H Agent. Rachel

Ann said she "enjoyed the experience", met many new friends, and practiced the skills she learned.



Bella Birket, Rachel Ann Cathcart, and Garrett Ulmer (from left to right) represent South Carolina 4-H at National Youth Agri-Science Summit. *Image credit: Mark Cathcart*

## Healthy Living Summit: Feb. 16-19, 2018

At the National Youth Summit on Healthy Living, students develop the knowledge and skills to address today's issues including nutrition education, physical fitness, wellness, and emotional well-being. Students are trained to create action plans to implement in their communities and teach other youth about what they have learned. The structure of the summits maximizes the amount of hands-on learning experiences and translates that learning to direct outcomes. Le'Shay Jailor of Berkeley County, Jordan Snipes of Florence County, and Laken Fulmer, Lindsey Scott, Allie Trotter, and Ginger Wertz of Saluda County represented South Carolina 4-H with chaperones Connie Lake, Saluda County 4-H Agent, and Miriam Roman, Youth Choice/Youth Voice Coordinator. Connie said, "This Summit offers a wealth of nutrition lessons usable for South Carolina."



Lindsey Scott, Allie Trotter, Jordan Snipes, Le'Shay Jailor, Laken Fulmer, and Ginger Wertz (from left to right) return from National Youth Healthy Living Summit. *Image credit: SC State Council Facebook Page*

## New Positions in South Carolina 4-H!

### Rebecca Baxley

Please join us in welcoming Ms. Rebecca Baxley as the **new Ag/4-H Agent in Marlboro County**. Rebecca received her B.S. degree in Agriculture and Natural Resources from Berea College (KY) and her M.S. degree in Animal Science (Equine Concentration) from Clemson University. She has experience in farm management, animal science and equine science course development, coaching and regulatory guidance. She looks forward to working with the youth and agriculture populations in Marlboro County. She can be contacted in the Marlboro County Extension office at [843-479-6851](tel:843-479-6851) or [annab@clemson.edu](mailto:annab@clemson.edu).



### Lauren Burdine

We are excited to welcome Ms. Lauren Burdine as the **new 4-H Agent in York County**. Lauren began working in York County in December 2017. Lauren is a native of Dacusville, SC in Pickens County. She attended Clemson University earning a Bachelors Degree in Environmental and Natural Resources, Conservation Biology with a minor in Biological Sciences. Lauren served as the Worth County 4-H Agent for the University of Georgia Extension for three years after working as a Georgia 4-H Environmental Educator. She is currently working on a Masters Degree in Agricultural & Environmental Education from UGA. Lauren can be reached at [eburdin@clemson.edu](mailto:eburdin@clemson.edu) or [803-684-9919](tel:803-684-9919).



### Sam Quinney

We welcome Mr. Samuel Quinney as the **new Livestock/4-H Agent in Allendale County**. Sam received his B.S. degree in Agriculture Mechanization and Business from Clemson University. He has worked with the Clemson Extension internship program and brings a variety of experience to the position. Sam looks forward to using the skills he has learned and putting them to practice in Allendale county. He can be contacted in the Allendale County Extension office at [803-584-4207](tel:803-584-4207) or [squinne@clemson.edu](mailto:squinne@clemson.edu).



### Katie Shaw

We are pleased to announce that Mrs. Katie Shaw, who has served as the Laurens County 4-H and Youth Development Agent in Laurens County for the past 11 years, is the **new 4-H and Equine Specialist for South Carolina**. Katie grew up in Orangeburg County 4-H and FFA. She received her Bachelor of Science and Master's Degree in Agriculture Education. In addition to her county duties, she has served as the SC 4-H Horse Program Assistant for the past 6 years, all of the officer position of SC Association of Extension 4-H Agents, and is the current Vice President of Epsilon Sigma Phi. She served as Advisor to South Carolina State 4-H Teen Council from 2010 to 2012. Katie along with her husband was award South Carolina Farm Bureau Young Farmer & Rancher Excellent in Agriculture Award in 2009 and Achievement Award in 2016. Katie also won the Clemson University Award for Cooperative Extension Distinguished Public Service in 2016. Katie lives with her husband and two daughters in Newberry, SC. She is always looking forward for what the future might hold for South Carolina 4-H. Katie can be reached at [berry7@clemson.edu](mailto:berry7@clemson.edu).

# Monthly 4-H Club Activity Idea

by Ashley Burns



## Binary Bracelets

**Objective:** To create confidence in basic programming principles through a craft.

**Age Range:** 9-18 years of age (good for beginner and advanced coders); use adaptation for younger audiences.

**Hands-on Activity:** To use the binary code alphabet to design a “wearable technology” bracelet.

**Life Skills:** HEAD -learning to learn, problem solving, planning/organizing;

HEART - social skills, communication, sharing;

HANDS - marketable skills, self-motivation;

HEALTH - self-esteem.

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### Introduction

Binary code is the fundamental language of computers. In the most basic sense, computers only understand opposites like “On/Off”, “Yes/No”, “0/1”, or “black/white”. Complex programs at their most basic level are written in binary code: 0 or 1.

Every unit of information is called a ‘bit’; bits make up ‘bytes’ of information, as in megabytes and kilobytes. Fun fact: half of a byte is called a ‘nibble’. In the case of this activity, 8 bits make up a single letter of the alphabet, which is a byte.

For more information on [binary code in action](#) or to see a [lesson on binary coding](#) watch the linked videos by Code.org.

### Activity Instructions

**Anyone can teach it and no computer science background is required!** Have youth pick a letter and create a bracelet using the corresponding binary code on the [“Binary Bracelets: Binary Decoder Key”](#) worksheet by Code.org.

For supplies, you need leather cord (cut to lengths of about 10 inches) or pipe cleaners to use as the bracelet foundation with at least 2 colors of bead for



youth to choose from. More colors will simply give them more 2-color combinations to create.

**Continued on page 6**

**Using leather, making the letter H:**

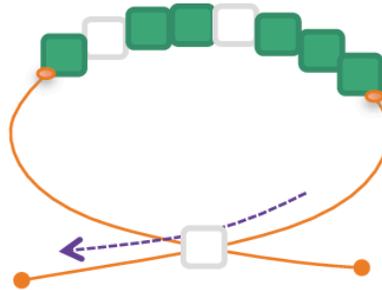
Step 1: Tie a knot in one end.

Step 2: Add a clear, keeper bead

Step 3: Tie a knot about 2 in down and place UV and green beans in series. Tie a second knot to secure beads.



Step 4: Feed the open end of the leather back through the keeper bead and, then, tie the final knot.

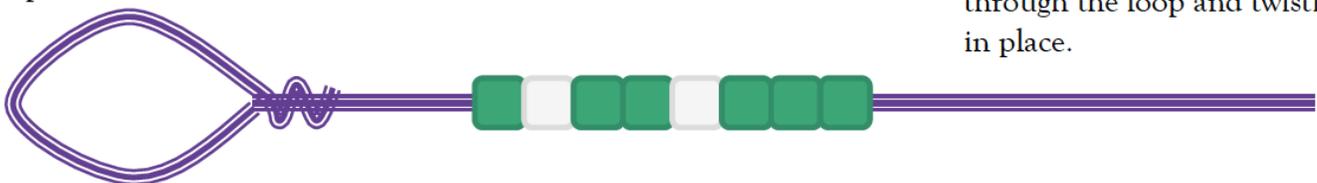


**Using a pipe cleaner, making the letter H:**

Step 1: Make a loop and twist in place on one end.

Step 2: Slide UV and green beads into place.

Step 3 (not shown): Wrap the pipe cleaner around the wrist and secure in place by feeding through the loop and twisting in place.



**Reflective questions**

- What letter did you choose to code?
- Why did you choose this letter?
- How many beads did it take to code one letter?
- Could you switch the colors you used to do this activity?
- Do you feel more confident using binary code?
- Could you determine a letter if given an 8-digit binary code?

**Conclusion**

This activity is a fun way to build confidence and explore the concept of binary coding. Youth also will have a tangible reminder of this fundamental computer science principle. Allowing for self-expression through designing their own letter, initials, word or phrase is an important part of positive youth development.

**Additional Resources:**

Code.org: CS Fundamentals Unplugged. <https://code.org/curriculum/unplugged>

Code.org: Teacher Lesson Plan – Lesson 15, Binary Bracelets. <https://curriculum.code.org/csf-1718/coursec/15/>

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